

# **State of Alaska FY2009 Governor's Operating Budget**

## **Department of Environmental Conservation Performance Measures**

# Contents

<b>Department of Environmental Conservation .....</b>	<b>4</b>
Mission .....	4
Core Services .....	4
End Result .....	4
Strategies to Achieve End Result .....	4
Major Activities to Advance Strategies .....	5
Prioritization of Agency Programs .....	17
<b>Administration Results Delivery Unit .....</b>	<b>19</b>
End Result .....	19
Strategies to Achieve End Result .....	19
<i>Component: Office of the Commissioner</i> .....	25
End Result .....	25
Strategies to Achieve End Result .....	25
<i>Component: Information and Administrative Services</i> .....	28
End Result .....	28
Strategies to Achieve End Result .....	28
<b>Environmental Health Results Delivery Unit .....</b>	<b>34</b>
End Result .....	34
Strategies to Achieve End Result .....	34
<i>Component: Food Safety &amp; Sanitation</i> .....	43
End Result .....	43
Strategies to Achieve End Result .....	43
<i>Component: Laboratory Services</i> .....	48
End Result .....	48
Strategies to Achieve End Result .....	48
<i>Component: Drinking Water</i> .....	53
End Result .....	53
Strategies to Achieve End Result .....	53
<i>Component: Solid Waste Management</i> .....	59
End Result .....	59
Strategies to Achieve End Result .....	59
<b>Air Quality Results Delivery Unit .....</b>	<b>65</b>
End Result .....	65
Strategies to Achieve End Result .....	65
<i>Component: Air Quality</i> .....	74
End Result .....	74
Strategies to Achieve End Result .....	74
<b>Spill Prevention and Response Results Delivery Unit .....</b>	<b>83</b>
End Result .....	83
Strategies to Achieve End Result .....	83
<i>Component: Contaminated Sites Program</i> .....	89
End Result .....	89
Strategies to Achieve End Result .....	89
<i>Component: Industry Preparedness and Pipeline Operations</i> .....	92
End Result .....	92
Strategies to Achieve End Result .....	92
<i>Component: Prevention and Emergency Response</i> .....	97
End Result .....	97
Strategies to Achieve End Result .....	97

<i>Component: Response Fund Administration .....</i>	<i>100</i>
<i>End Result.....</i>	<i>100</i>
<i>Strategies to Achieve End Result .....</i>	<i>100</i>
<b>Water Results Delivery Unit .....</b>	<b>103</b>
End Result .....	103
Strategies to Achieve End Result.....	103
<i>Component: Water Quality.....</i>	<i>115</i>
<i>End Result.....</i>	<i>115</i>
<i>Strategies to Achieve End Result .....</i>	<i>115</i>
<i>Component: Facility Construction .....</i>	<i>124</i>
<i>End Result.....</i>	<i>124</i>
<i>Strategies to Achieve End Result .....</i>	<i>124</i>

## Department of Environmental Conservation

### Mission

Protect human health and the environment.

### Core Services

- Develop and enforce standards for protection of the environment that allow for sustainable economic growth.
- Provide controls and enforcement for the prevention and abatement of pollution to the environment.
- Provide controls and enforcement to protect citizens from unsafe sanitary practices.

End Result	Strategies to Achieve End Result
<p><b>A: The Environment is Protected.</b></p> <p><u>Target #1:</u> Impacts of new and historical pollution to land and water are reduced.  <u>Measure #1:</u> % increase from the prior year of polluted environments remediated or restored for use.</p> <p><u>Target #2:</u> Clean Air  <u>Measure #2:</u> % of population living in areas in compliance with health based Air Quality Standards (natural events excluded).</p>	<p><b>A1: Establish Protective Standards</b></p> <p><u>Target #1:</u> Priority programs for environmental protection are up to date by 2008.  <u>Measure #1:</u> Revisions to priority programs for environmental protection are % complete (4 yr Strategic Plan).</p> <p><b>A2: Contain and Cleanup Pollution in the Environment</b></p> <p><u>Target #1:</u> 98% of newly reported spills of oil and hazardous substances and contaminated sites cleaned up annually.  <u>Measure #1:</u> % of newly reported spills of oil and hazardous substances and contaminated sites cleaned up annually.</p> <p><b>A3: Control Pollution to the Environment</b></p> <p><u>Target #1:</u> Pollution control inspection and certification programs are implemented by FY2007.  <u>Measure #1:</u> % of inspection and certification programs implemented by FY2007.</p> <p><u>Target #2:</u> Known regulated industry and community facilities operate with authorizations/permits or certifications.  <u>Measure #2:</u> % of known regulated industry or community facilities operating with appropriate authorizations/permits or certifications.</p> <p><b>A4: Enforce Pollution Controls</b></p> <p><u>Target #1:</u> 100% of environmental complaints are successfully resolved.  <u>Measure #1:</u> The percent of successfully resolved environmental complaints.</p>

End Result	Strategies to Achieve End Result
<b>B: Citizens are Protected from Unsafe Sanitary Practices</b>  <u>Target #1:</u> No public illness outbreaks in regulated facilities. <u>Measure #1:</u> Number of regulated facilities with reported public illness outbreaks.	<b>B1: Establish Protective Standards</b>  <u>Target #1:</u> Priority programs for safe sanitary practices are up to date by 2008. <u>Measure #1:</u> Revisions to priority programs for safe sanitary practices are % complete (4 yr Strategic Plan).  <b>B2: Control Sanitary Practices</b>  <u>Target #1:</u> Safe sanitary practice inspection and certification programs are implemented by FY2007. <u>Measure #1:</u> % of programs for inspection and certification for safe sanitary practices implemented by FY2007.  <b>B3: Enforce Controls for Safe Sanitary Practices</b>  <u>Target #1:</u> 100% of environmental complaints are successfully resolved. <u>Measure #1:</u> The percent of successfully resolved environmental complaints.

### Major Activities to Advance Strategies

- Develop and implement protective standards.
- Provide statewide support systems and information management.
- Provide assurances of safe sanitary conditions.
- Respond to, contain, and cleanup incidents of pollution to the environment.
- Provide effective and efficient permit and inspection programs.
- Enforce compliance fairly and consistently statewide.

### FY2009 Resources Allocated to Achieve Results

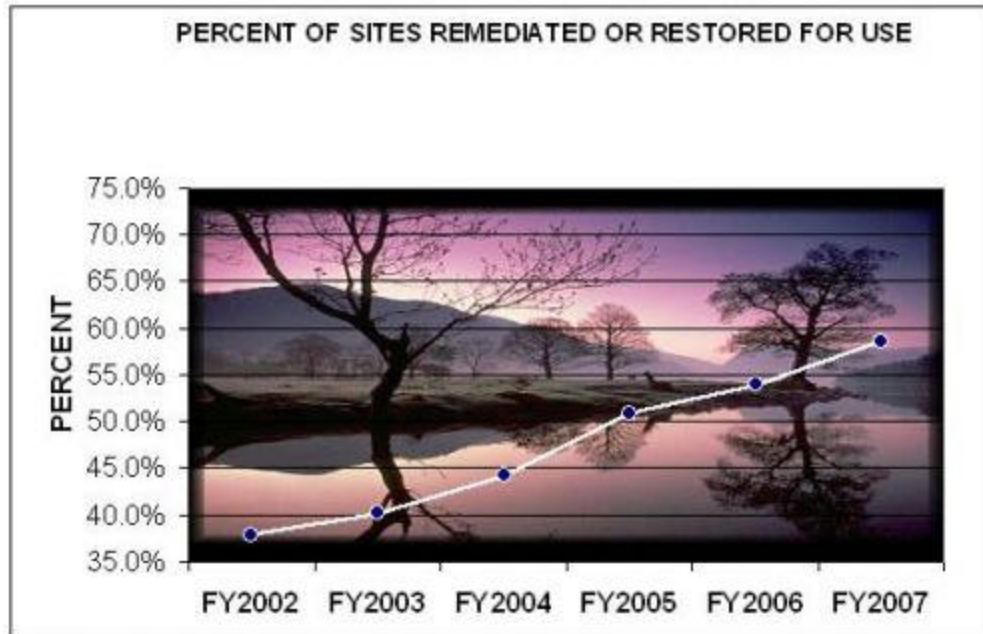
FY2009 Department Budget: \$72,001,900	<b>Personnel:</b>	
	Full time	531
	Part time	1
	<b>Total</b>	<b>532</b>

## Performance Measure Detail

### A: Result - The Environment is Protected.

**Target #1:** Impacts of new and historical pollution to land and water are reduced.

**Measure #1:** % increase from the prior year of polluted environments remediated or restored for use.



**Analysis of results and challenges:** This measure combines Spill Prevention and Response data for recovery of sites contaminated with oil or hazardous substances with that of the Water Division on recovered waterbodies.

#### Spill Prevention and Response - Contaminated Sites Program

Alaska has many sites that have been contaminated with oil or hazardous substances. Additional sites are discovered almost daily. Most of the contamination is historic, much of it occurring before the risks to the environment and human health were known. Severely contaminated sites may also have adverse economic and social impacts in terms of cleanup costs, or limitations on land use, land sales or transfers.

It is important that historic contaminated sites are found and reported so that appropriate steps can be taken to protect the public. However, as the data shows, for every site that is cleaned or cleaned to a point that there is no further risk and no further action required, nearly as many contaminated sites are discovered each year, making it a challenge to show progress toward reducing the number of contaminated sites in the state.

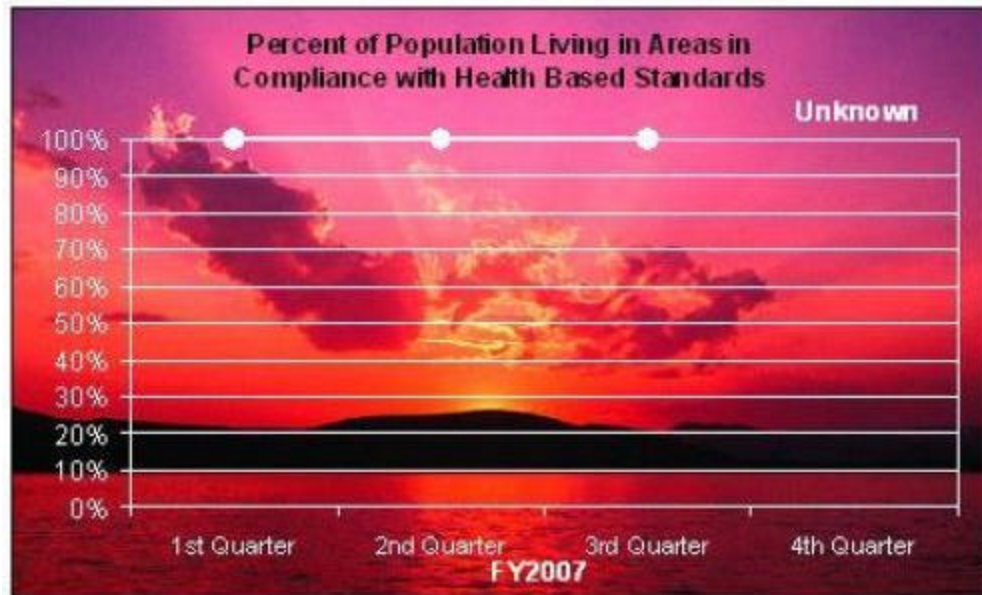
The program's goal is to be able to continue remediating sites at a rate that maintains the relative percentage of total sites remediated the previous year. Data shows that in FY2007 there was a 4% increase over the prior year.

#### Division of Water

Polluted, or "impaired" waterbodies are identified in the biennial "Integrated Report" submitted by the Department to the Environmental Protection Agency. Data for this measure is available every two years when the report is prepared. The Division of Water establishes a target of at least 10 active restoration projects per year. Restoration projects may be conducted by grantees who have received funds through the Alaska's Clean Water Actions (ACWA) grant program, by contractors, by other State agencies with funds received from the Alaska Department of Environmental Conservation (ADEC) through Reimbursable Services Agreements, or by Department personnel. During FY2007, 21 restoration projects were ongoing on impaired waters.

**Target #2:** Clean Air

**Measure #2:** % of population living in areas in compliance with health based Air Quality Standards (natural events excluded).



**Analysis of results and challenges:** Air monitoring is performed to ensure compliance with the National Ambient Air Quality Standards (NAAQS) for the protection of public health. Traditionally monitoring takes place in larger communities or where complaints have been received. Air Quality for the rest of the state is assumed to be good.

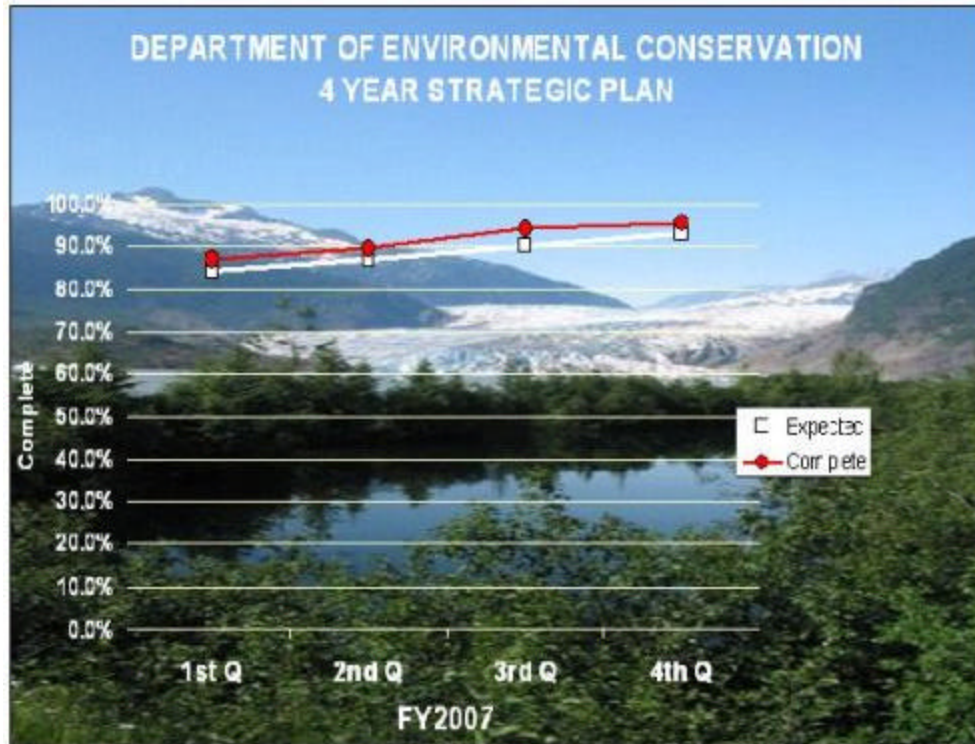
The graph shown above demonstrates that there were no violations of the carbon monoxide (CO) standard during the first three quarters of FY2007 from human caused activity within the State's customary monitoring network. The 4th quarter data for FY2007 will be available December 2007.

In addition to the State monitoring network, the Air Quality division is engaged in an air monitoring project to measure airborne levels of dust (PM-10) pollution as part of a Department of Transportation (DOT) research project evaluating the effectiveness of paving roads in Kotzebue. High airborne dust levels from vehicle traffic on unpaved roads violate the health based standard in Kotzebue and other rural communities. Although monitoring data exists only in a few communities, conditions around the state suggest that the violations of the PM-10 standard are a common occurrence in the summer in rural Alaskan villages. The Department will be working with the affected communities and DOT to develop an effective control strategy for dust in the Region.

## A1: Strategy - Establish Protective Standards

**Target #1:** Priority programs for environmental protection are up to date by 2008.

**Measure #1:** Revisions to priority programs for environmental protection are % complete (4 yr Strategic Plan).



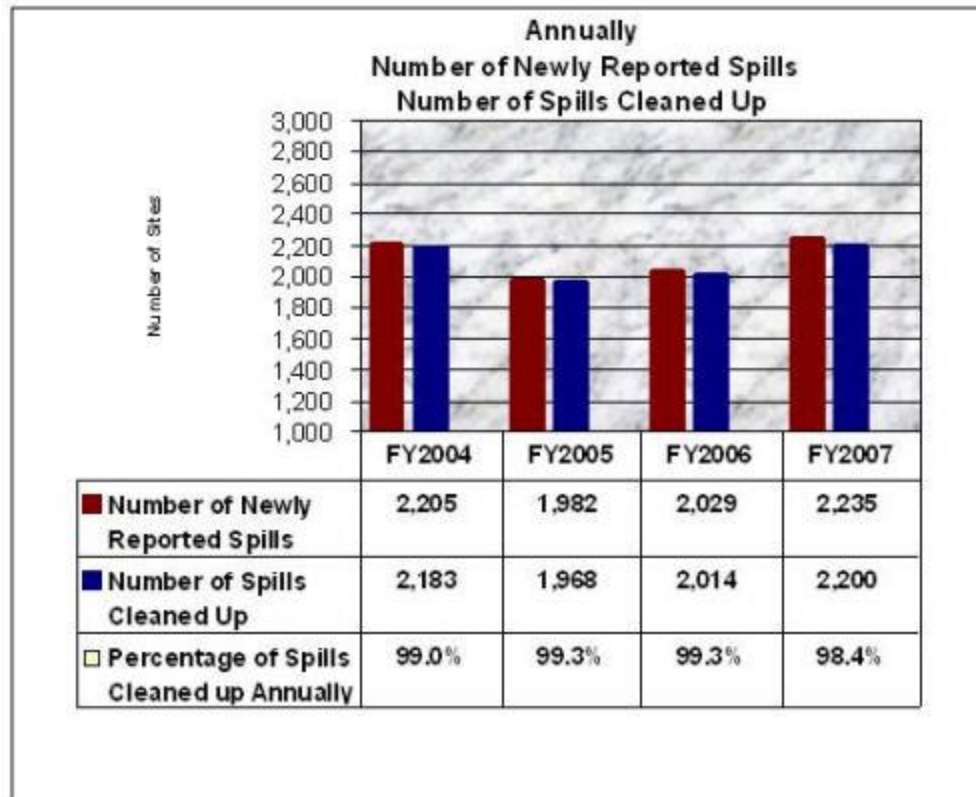
**Analysis of results and challenges:** DEC's strategic framework is based on the premise that, if we fulfill our duties (statutorily mandated) and accomplish our mission, the ultimate result will be that public health and the environment will be protected. We do this by influencing external entities to prevent, abate or control pollution through a comprehensive protection program. We don't prevent pollution – we influence others to take preventative action and establish standards by which to measure success.

This measure determines departmental progress against the 4 Year Strategic Plan. Progress is measured against expected results for individual projects and averaged over the department. Overall, at 93.5% completion, performance exceeds expectation.

## A2: Strategy - Contain and Cleanup Pollution in the Environment

**Target #1:** 98% of newly reported spills of oil and hazardous substances and contaminated sites cleaned up annually.

**Measure #1:** % of newly reported spills of oil and hazardous substances and contaminated sites cleaned up annually.



**Analysis of results and challenges:** There are two types of contaminated sites reported to divisions within the Department of Environmental Conservation each year; new spills of oil and hazardous substances and discovery of sites with historical (old) contamination.

The sooner a spill of oil or hazardous substances is contained and cleaned, the less impact it will have on the environment, on human health and on the economy. Our goal is to respond to, contain, and clean up spills as they occur to prevent them from causing wide-spread damage to water sources, land, wildlife, and adjoining properties.

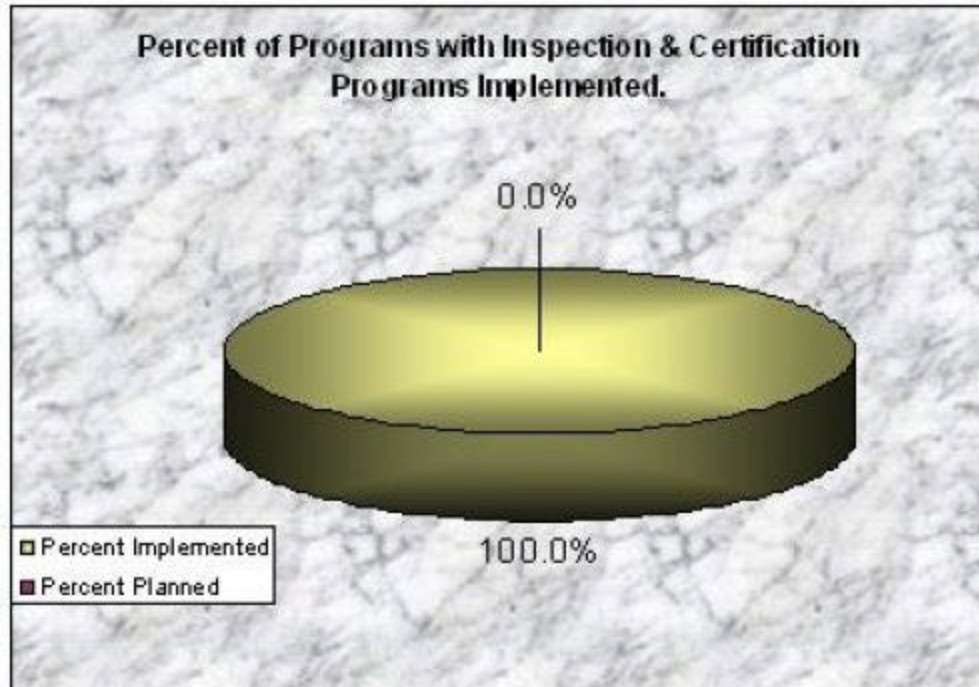
As sites are reported they are either cleaned and closed through the initial response phase or are referred to the Contaminated Sites program for long-term remediation. Only the largest and most complex new spills, such as spills that impact ground water, are referred to the Contaminated Sites program for long-term remediation.

The program's goal is to annually clean a number of sites that is at least 98% of the number of newly reported sites each year. Data indicates that in FY2007, 98.4% of new spills reported were contained and cleaned to a point that allows continued use of property with no further cleanup action required.

**A3: Strategy - Control Pollution to the Environment**

**Target #1:** Pollution control inspection and certification programs are implemented by FY2007.

**Measure #1:** % of inspection and certification programs implemented by FY2007.



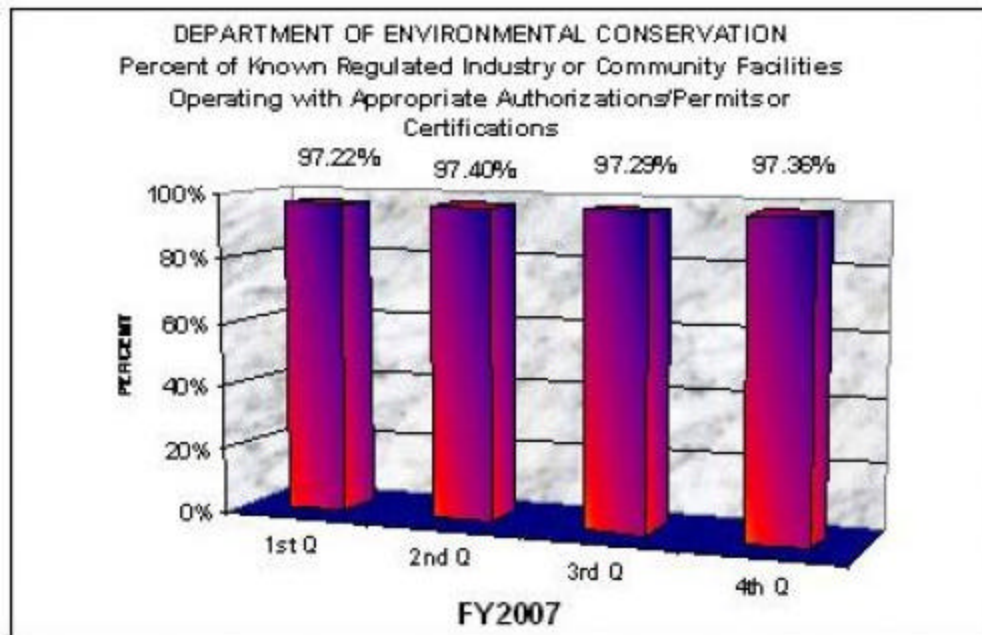
**Analysis of results and challenges:** DEC's strategic framework is based on the premise that, if we fulfill our duties (statutorily mandated) and accomplish our mission, the ultimate result will be that public health and the environment will be protected. We do this by influencing external entities to prevent abate or control pollution through a comprehensive protection program. We don't prevent pollution – we influence others to take preventative action.

In order to be sure that protective standards are met and pollution controls followed, inspection and certification programs are established to document compliance.

The measure summarizes department progress against a plan for implementing new inspection and certification programs. The goal has been met with 100% of inspection and certification programs being implemented by FY2007.

**Target #2:** Known regulated industry and community facilities operate with authorizations/permits or certifications.

**Measure #2:** % of known regulated industry or community facilities operating with appropriate authorizations/permits or certifications.



**Analysis of results and challenges:** In order to ensure protective standards are met and pollution controls followed, DEC authorizes or certifies the operation of industry or community facilities. Please also note Strategy #A3-1.

#### Division of Air Quality

Our goal is for 100% of regulated sources to operate under the appropriate permit or approval.

DEC controls air pollution to the environment through the following permits: pre-approved limits, owner requested limits, permits by rule, general permits, source-specific permits. State law allows an applicant to operate a source under an operating permit application shield until the Department issues an operating permit. Major source permits are required for air pollution sources covered under Title I and Title V of the federal Clean Air Act. Similar to many other states, Alaska's permit program also requires issuance of minor source permits for sources having the potential to cause unhealthy air quality conditions.

The Department's Air Permits Program is mature with respect to meeting all federal requirements. Although the Department has not kept records on this specific goal before FY2004, close to 100% of all regulated air permit sources operate under an air permit or application shield. The Air Permits program completed a major reform effort in 2005 to attain a predictable, reliable and rational permitting goal. The reforms were implemented and began to show results in FY2006.

The program continues to achieve its goals through FY2007. As more five-year air permits expire, the program will continue to renew general operating permits and source-specific permits. For air permits, we anticipate little change in the current success rate.

#### Division of Spill Prevention and Response

Regulated facilities and vessel operators including: oil exploration and oil production facilities, refineries, railroads, crude oil pipelines, terminals, tank farms and tankers, non-crude oil tank vessels and barges, and non-tank vessels are required to have approved oil spill contingency plans and certificates of financial responsibility in place before they are allowed to operate in Alaska. Contingency plans outline the various steps and procedures that would be followed to allow quick and effective cleanup in the event of an

unanticipated oil spill. Certificates of financial responsibility ensure that the party responsible for a spill will be able to pay for cleanup costs, including reimbursement for any State funds spent as a result of the spill. These facilities and vessel operators cannot legally operate without approved contingency plans and certificates of financial responsibility in place, and compliance is maintained at 100%.

Underground petroleum storage tanks are also regulated. These are primarily gas stations, RV parks and other facilities that maintain underground petroleum storage. Federal law requires these facilities to be inspected and tagged every three years or they are unable to accept deliveries. The data for this measure will fluctuate as new underground petroleum storage tanks are opened and existing tanks are closed.

#### Division of Environmental Health

Municipal landfills that receive over five tons of waste per day (Class I and Class II Landfills) require a permit from DEC. All facilities required to have permits either have them or are in the process of applying or renewing them.

In the current permitting system, small communities producing less than 5 tons of municipal solid waste per day are required to have a Class III permit, but only 25% of the Class III communities have permitted landfills. The department is changing the structure of the solid waste program to improve the number of authorized Class III landfills.

Location specific data is being developed for the Class III landfills that will allow a community to evaluate if they qualify for the prior authorization landfill permit program. A risk calculator, linked to landfill design criteria and operational parameters that are specific to the landfill location, will be used to make the evaluation and qualify for prior authorization of the landfill.

#### Division of Water

The Wastewater Discharge Permit program issues three kinds of wastewater discharge approvals:

- 1) State individual permits and authorizations under 18 AAC 72
- 2) State permits and plan approvals of on-site disposal (septic systems) under 18 AAC 72
- 3) Certification that EPA-issued NPDES permits meet state water quality standards under 18 AAC 70.

State-issued permits and especially authorizations under state general permits, can meet the 100% measure more easily than certification of NPDES permits. These state-issue permits can be processed quickly because they have predictable discharges and do not require advanced analysis of the impacts. However, NPDES permits are for large volume, more complex discharges and state certification can be slow during permit negotiations and responding to comments received by the public on draft permits.

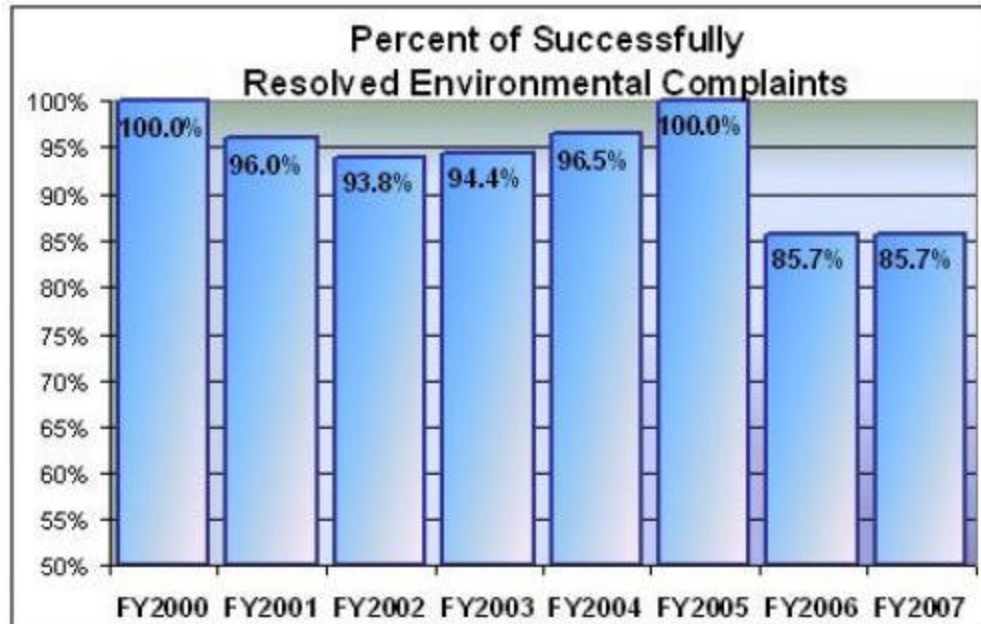
As part of NPDES primacy assumption, some state permits may need to be converted to NPDES permits. DEC and the EPA plans to share permit duties as capacity building for primacy. With the transition, the program does not expect to meet its goal of 100% in this fiscal year.

A major tool for tracking and keeping permits current is the new permit database developed in anticipation of NPDES primacy. Achieving the 100% target will be improved with automatic notification of renewals built into the system.

## A4: Strategy - Enforce Pollution Controls

**Target #1:** 100% of environmental complaints are successfully resolved.

**Measure #1:** The percent of successfully resolved environmental complaints.



**Analysis of results and challenges:** The Alaska Department of Environmental Conservation has primary responsibility for the enforcement of laws governing the protection of water, land and air quality.

Protecting the environment requires that we establish protective standards and enforce those standards. The effectiveness of our enforcement programs can be measured by looking at the department's ability to identify and return violators to a state of compliance.

A complaint is an alleged violation of an environmental regulation or statute for which ADEC has the responsibility to enforce. A complaint may contain one or multiple alleged violations. Resolution occurs when a violation is confirmed, the responsible party is identified, and corrective action has been initiated to bring the violator(s) into compliance.

Complaints are usually resolved through administrative or civil remedies. However, when polluting or environmentally harmful conduct becomes intentional, knowing, or reckless, criminal enforcement must be considered. In addition to threatening the quality of Alaska's environment, nearly all environmental crimes involve a risk to public health, either now or in the future. Environmental crimes include: the illegal discharge of pollutants into Alaska's water sources; the improper disposal of solid or hazardous waste; and the illegal discharge of pollutants into the atmosphere.

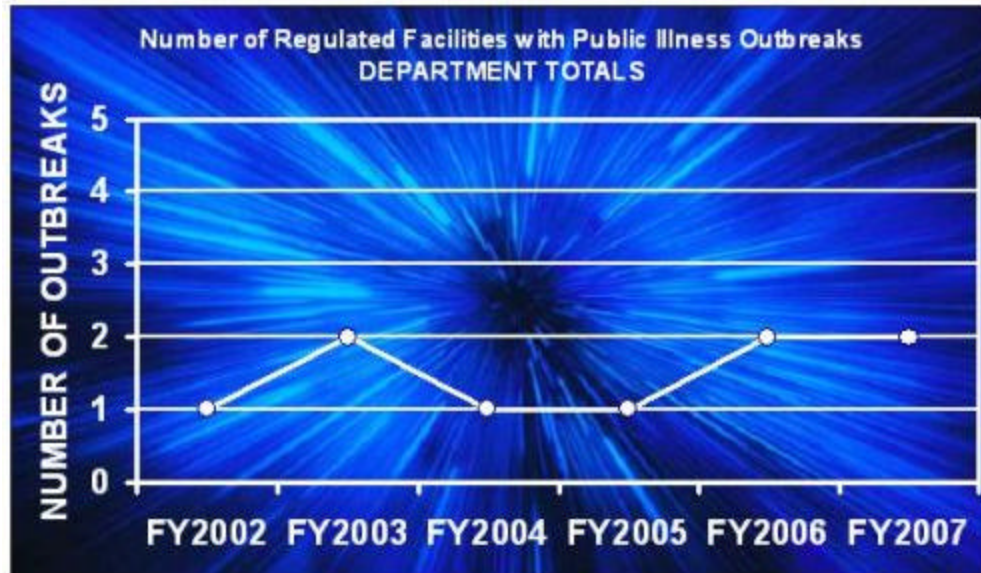
The receipt and resolution of complaints are tracked in the department's complaint and enforcement tracking database. Many complaints will be resolved in years subsequent to the year the complaint was reported and the database updated for the year the alleged violation occurred. Therefore, prior year data is subject to change as complaints are resolved. The database provides annual totals which are available for FY2007.

(For further information on administrative penalties or to view the FY2004 enforcement report – visit <http://www.dec.state.ak.us/das/pdfs/enfreport.pdf>)

## B: Result - Citizens are Protected from Unsafe Sanitary Practices

**Target #1:** No public illness outbreaks in regulated facilities.

**Measure #1:** Number of regulated facilities with reported public illness outbreaks.



**Analysis of results and challenges:** The Epidemiology section of Health and Social Services (HSS) conducts investigations in the outbreaks of human illness and death with the help of DEC investigators, they determine the source of the outbreak. In coordination with Department of Health and Social Services (DHSS), Environmental Health Officers investigate cases of suspected food borne illness on a routine basis. Investigation requires Food Safety staff to take food case histories and conduct risk focused inspections of regulated food establishments to determine if food preparation, handling, source, or employee health may be the causative or contributing factors for the illness. The measure does not include illness determined through investigation to be a result of norovirus infections associated with food and sanitation practices, or food borne illness which results from consumer mishandling of retail food.

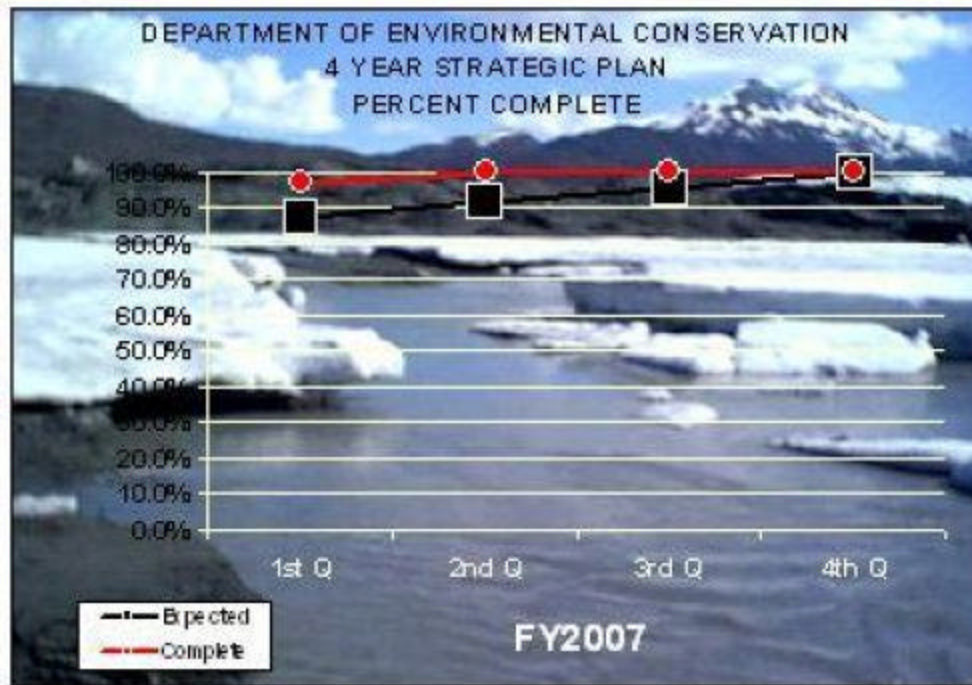
Data displayed here reflects the number of food facilities and drinking water systems regulated by DEC, that were determined to be the source of an outbreak during the reporting period. Both outbreaks were a cluster of gastrointestinal illness associated with conferences held at Alaskan hotels.

While we can track those outbreaks reported to HSS, many incidents of illness related to food or drinking water may never actually get reported. In milder cases, symptoms may be mistaken for ordinary flu or an upset stomach and be overlooked by doctors or individuals.

## B1: Strategy - Establish Protective Standards

**Target #1:** Priority programs for safe sanitary practices are up to date by 2008.

**Measure #1:** Revisions to priority programs for safe sanitary practices are % complete (4 yr Strategic Plan).



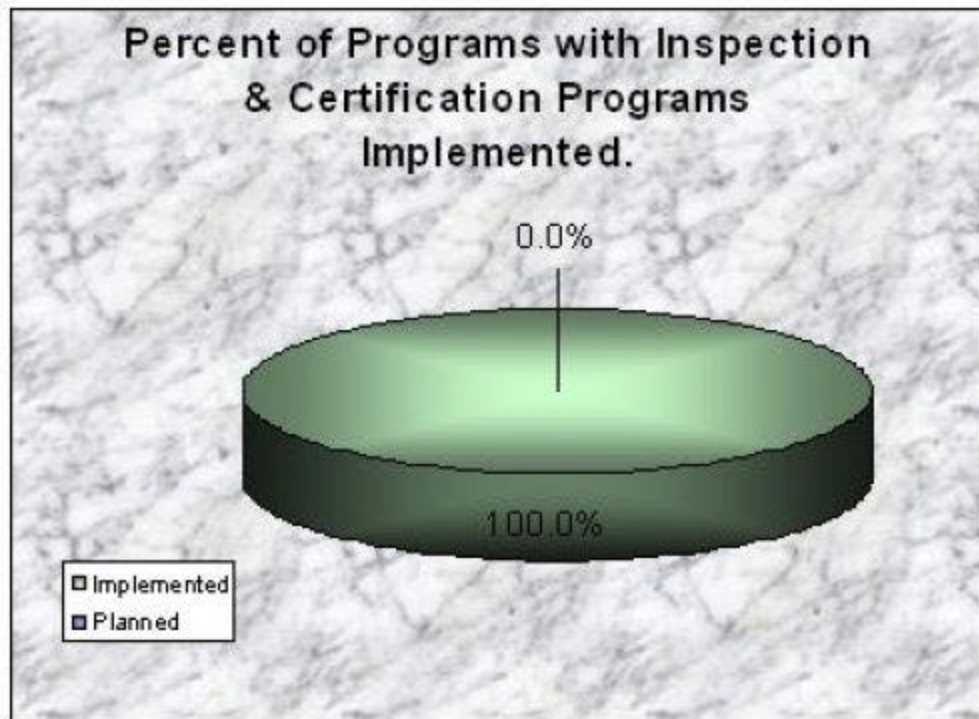
**Analysis of results and challenges:** DEC's strategic framework is based on the premise that, if we fulfill our duties (statutorily mandated) and accomplish our mission, the ultimate result will be that public health will be protected. We do this by influencing external entities to utilize safe sanitary practices through a comprehensive protection program. We don't prevent unsafe sanitary practices – we influence others to take preventative action and establish standards by which to measure success.

This measure determines departmental progress against the 4 Year Strategic Plan. Progress is measured against expected results for individual projects, and averaged over the department. During FY2007, this measure has been met at 100% completion.

**B2: Strategy - Control Sanitary Practices**

**Target #1:** Safe sanitary practice inspection and certification programs are implemented by FY2007.

**Measure #1:** % of programs for inspection and certification for safe sanitary practices implemented by FY2007.



**Analysis of results and challenges:** DEC's strategic framework is based on the premise that, if we fulfill our duties (statutorily mandated) and accomplish our mission, the ultimate result will be that public health will be protected. We do this by influencing external entities to utilize safe sanitary practices through a comprehensive protection program. We don't prevent unsafe sanitary practices – we influence others to take preventative action and establish inspection and certification programs by which to measure success.

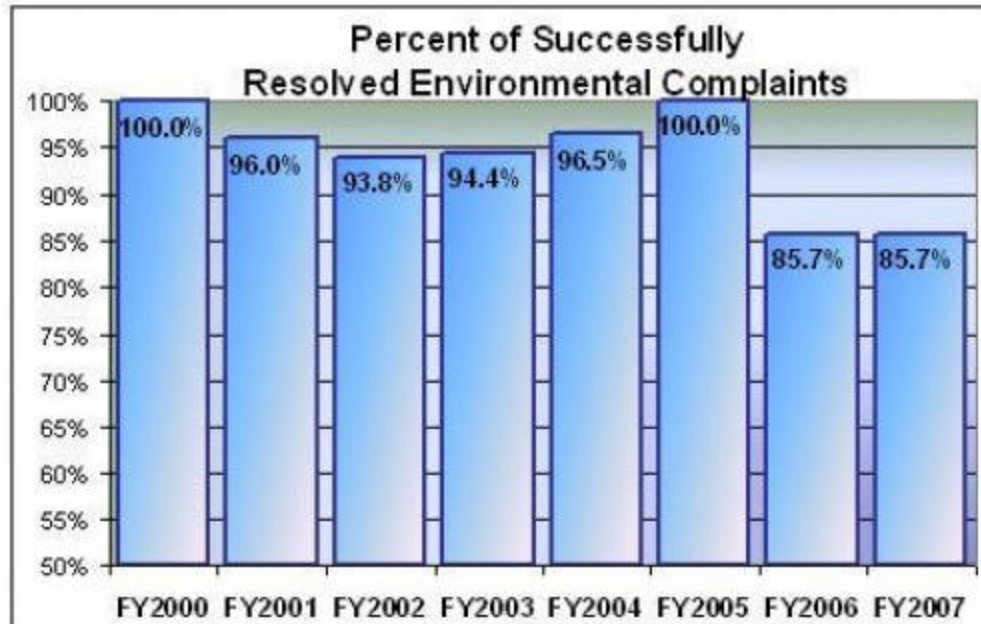
These programs are established to allow us to document compliance.

The measure summarizes department progress with development and implementation of planned programs. 100% of all programs have been completed by the end of FY2007 and we have met our goal.

### B3: Strategy - Enforce Controls for Safe Sanitary Practices

**Target #1:** 100% of environmental complaints are successfully resolved.

**Measure #1:** The percent of successfully resolved environmental complaints.



**Analysis of results and challenges:** The Alaska Department of Environmental Conservation has primary responsibility for the enforcement of laws governing the protection of citizens from unsafe sanitary practices.

Protecting public health requires that we establish protective standards and enforce those standards. The effectiveness of our enforcement programs can be measured by looking at the department's ability to identify and return violators to a state of compliance.

A complaint is an alleged violation of an environmental regulation or statute for which ADEC has the responsibility to enforce. A complaint may contain one or multiple alleged violations. Resolution occurs when a violation is confirmed, the responsible party is identified, and corrective action has been initiated to bring the violator(s) into compliance.

Complaints are usually resolved through administrative or civil remedies. However, when harmful conduct becomes intentional, knowing, or reckless, criminal enforcement must be considered. In addition to threatening the quality of Alaska's environment, nearly all environmental crimes involve a risk to public health, either now or in the future. Environmental crimes include: the illegal discharge of pollutants into Alaska's water sources; the improper disposal of solid or hazardous waste; and the illegal discharge of pollutants into the atmosphere.

The receipt and resolution of complaints are tracked in the department's complaint and enforcement tracking database. Many complaints will be resolved in years subsequent to the year the complaint was reported and the database updated for the year the alleged violation occurred. Therefore, prior year data is subject to change as complaints are resolved. The database provides annual totals which are available for FY2007.

For further information on administrative penalties or to view the FY2004 enforcement report – visit <http://www.dec.state.ak.us/das/pdfs/enfreport.pdf>

### Prioritization of Agency Programs

(Statutory Reference AS 37.07.050(a)(13))

Each division director was instructed to prioritize his or her program and submit the results to the Commissioner's

Office. The Commissioner formed a group of senior management staff to review the divisions' priorities and convert them into departmental priorities. Program priorities were listed using the department's performance results for protecting the environment and protecting Alaskans from unsafe sanitary practices as the primary ranking criteria.

- |  |  |
|--|--|
| 1. Commissioner's Office   | 13. Office of the State Veterinarian   |
| 2. Finance/Budget/Procurement                                    | 14. Emergency Response                 |
| 3. Climate Change  | 15. General Laboratory Services        |
| 4. Air Permitting Program  | 16. Contaminated Sites                 |
| 5. Network Services  | 17. Pesticides                         |
| 6. Air Non-Point Mobile Sources and Monitoring Program           | 18. Solid Waste                        |
| 7. Drinking Water Safety Program                                 | 19. Operator Certification Program     |
| 8. Wastewater Permitting and Compliance Program                  | 20. Environmental Crimes               |
| 9. Food Safety and Sanitation                                    | 21. Remote Maintenance Worker Program  |
| 10. Water Quality Standards and Monitoring Program               | 22. Municipal Grants and Loan Programs |
| 11. Non-Point Source Pollution Permitting and Protection Program | 23. Village Safe Water Program         |
| 12. Industry Preparedness  | 24. Ocean Ranger Program               |

## Administration Results Delivery Unit

### Contribution to Department's Mission

Provide administrative support and policy direction to the divisions in the department.

### Core Services

- Develop partnerships and work cooperatively with the regulated community and other government and non-governmental stakeholders to protect human health and the environment.
- Lead department employees to accomplish department priorities and performance measures.
- Represent the department's authorities and responsibilities on the Governor's cabinet.
- Work with the legislature on the department's budget and legislative priorities.
- Represent the department's authorities and responsibilities on the Exxon Valdez Trustees Council.
- Adjudicate administrative appeals of department decisions.
- Approve department regulations for public notice and adopt final regulation changes for filing with the Lieutenant Governor.
- Provide administrative support services to customers and clients of the department.
- Develop and implement sound administrative policies and practices for the department.
- Provide timely and accurate information.
- Minimize risk from operations.
- Enforce protective standards for environmental and sanitary practices.

End Result	Strategies to Achieve End Result
<p><b>A: Effective, efficient administrative support.</b></p> <p><u>Target #1:</u> 90% of survey respondents rate support services at acceptable or higher.</p> <p><u>Measure #1:</u> % of survey respondents rate support services at acceptable or higher.</p>	<p><b>A1: Lead development and implementation of Department initiatives.</b></p> <p><u>Target #1:</u> Strategic Plan is 100% implemented by fiscal year 2008.</p> <p><u>Measure #1:</u> % of Strategic Plan implemented.</p> <p><b>A2: Improve availability, quality, and quantity of data for external and internal users.</b></p> <p><u>Target #1:</u> Network is available to employees 7 days a week.</p> <p><u>Measure #1:</u> % of time network is available.</p> <p><b>A3: Ensure compliance with all federal and state requirements.</b></p> <p><u>Target #1:</u> 100% of audit exceptions investigated and successfully resolved.</p> <p><u>Measure #1:</u> % of audit exceptions investigated and successfully resolved.</p> <p><b>A4: Investigate criminal violations.</b></p> <p><u>Target #1:</u> Criminal violations are investigated and successfully resolved.</p> <p><u>Measure #1:</u> % of criminal investigations successfully investigated and resolved.</p>

### Major Activities to Advance Strategies

- Lead the department to accomplish goals and communicate performance.
- Lead the development of protective standards.
- Work within the government and with stakeholders, the public and the legislature to communicate department initiatives and needs.
- Develop and maintain support services for the department's customers and clients; other agencies, the legislature and department employees.
- Identify departmental training needs and develop training plans.
- Develop enforcement procedures for departmental permitting programs.
- Develop and maintain policies and procedures governing financial, budget, procurement and information systems management.

### FY2009 Resources Allocated to Achieve Results

**FY2009 Results Delivery Unit Budget: \$7,474,400**

**Personnel:**

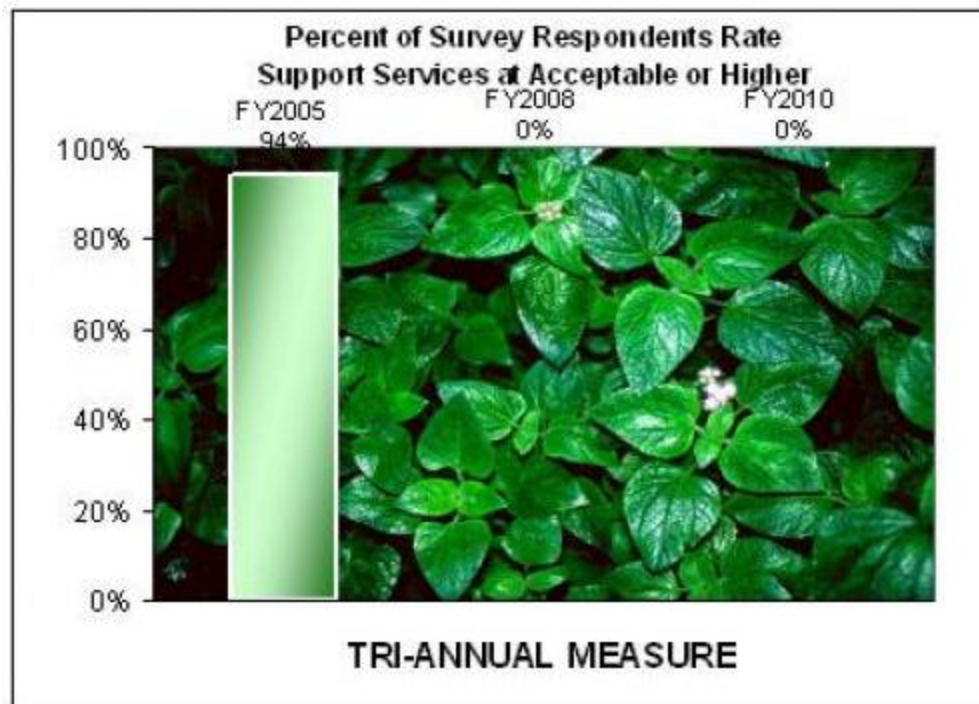
Full time	56
Part time	0
<b>Total</b>	<b>56</b>

### Performance Measure Detail

#### A: Result - Effective, efficient administrative support.

**Target #1:** 90% of survey respondents rate support services at acceptable or higher.

**Measure #1:** % of survey respondents rate support services at acceptable or higher.



**Analysis of results and challenges:** A survey is given to all Department of Environmental Conservation

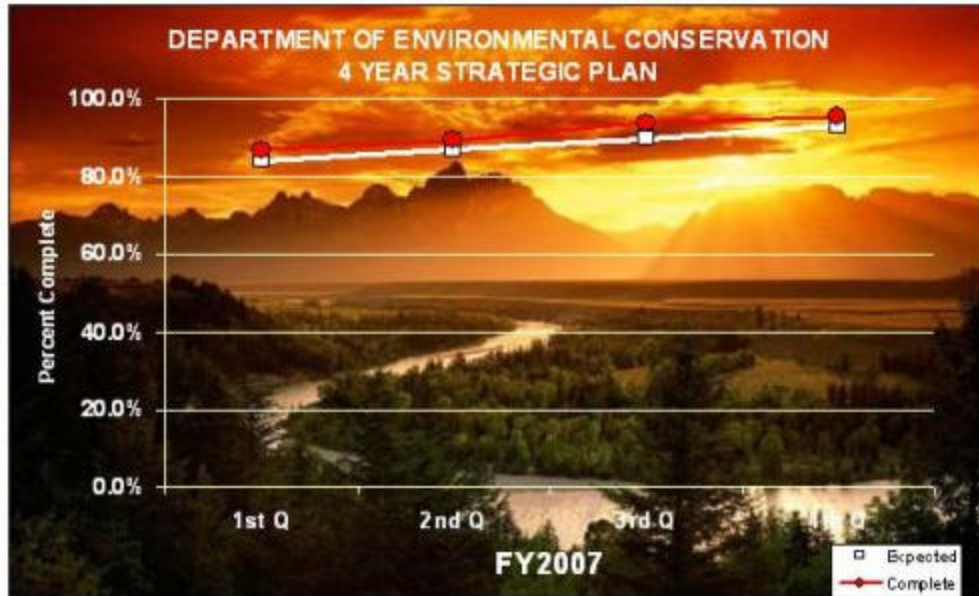
employees on a three year cycle. The survey measures the percent of customer satisfaction with the departments Administrative Services staff and includes all services within the administrative unit, such as Budget and Financial Services (including document processing), Information Technology, Procurement and the Environmental Crimes Unit.

Results from the survey taken in FY2005 show that 94% of the Division's customers are satisfied with the support services being provided. Results will be updated with a new survey in FY2008.

### **A1: Strategy - Lead development and implementation of Department initiatives.**

**Target #1:** Strategic Plan is 100% implemented by fiscal year 2008.

**Measure #1:** % of Strategic Plan implemented.



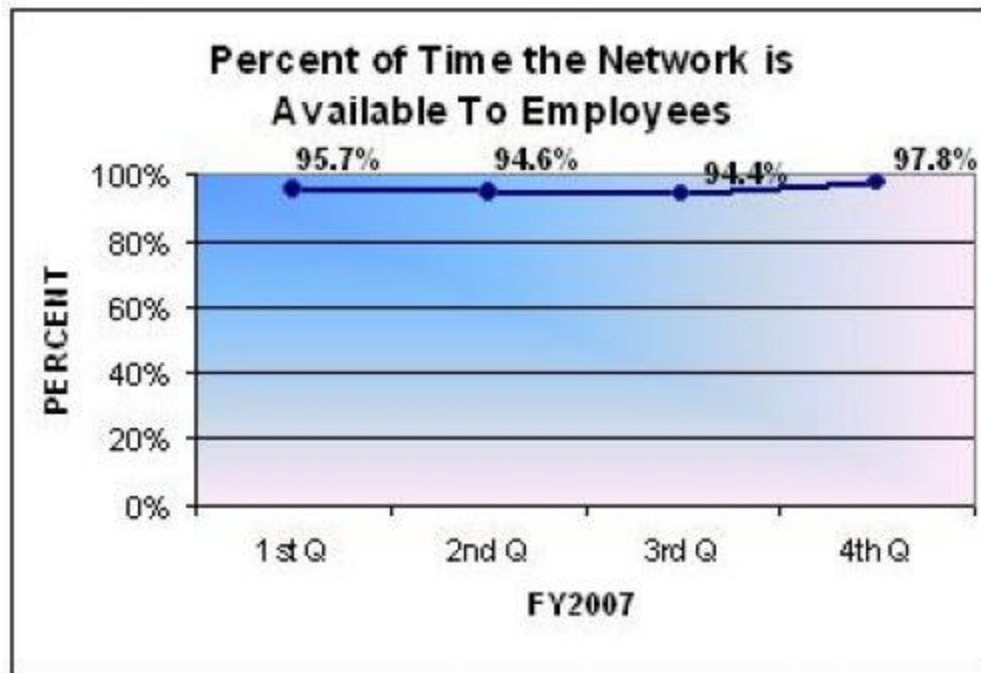
**Analysis of results and challenges:** DEC's strategic framework is based on the premise that, if we fulfill our duties (statutorily mandated) and accomplish our mission, the ultimate result will be that public health and the environment will be protected. We do this by influencing external entities to prevent, abate or control pollution through a comprehensive protection program. We don't prevent pollution – we influence others to take preventative action and establish standards by which to measure success.

This measure determines departmental progress against the 4 Year Strategic Plan. Progress is measured against expected results for individual projects, and averaged over the department. Within the strategic plan, performance exceeds expectations.

**A2: Strategy - Improve availability, quality, and quantity of data for external and internal users.**

**Target #1:** Network is available to employees 7 days a week.

**Measure #1:** % of time network is available.

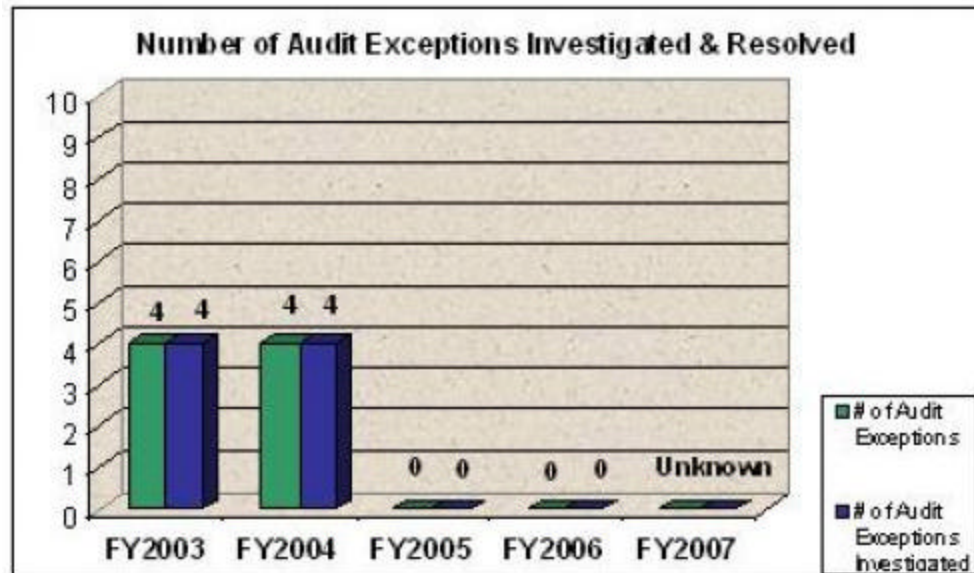


**Analysis of results and challenges:** During the last two quarters of FY2007 the Information Services Section was able to successfully provide network services 7 days a week. The results were based on the uptime of 17 critical department servers providing file and print, mail, and web services. A full day of network downtime was counted any time at least 1 server was down for more than 8 hours. Routine maintenance downtime was limited to short periods during the off hours.

### A3: Strategy - Ensure compliance with all federal and state requirements.

**Target #1:** 100% of audit exceptions investigated and successfully resolved.

**Measure #1:** % of audit exceptions investigated and successfully resolved.



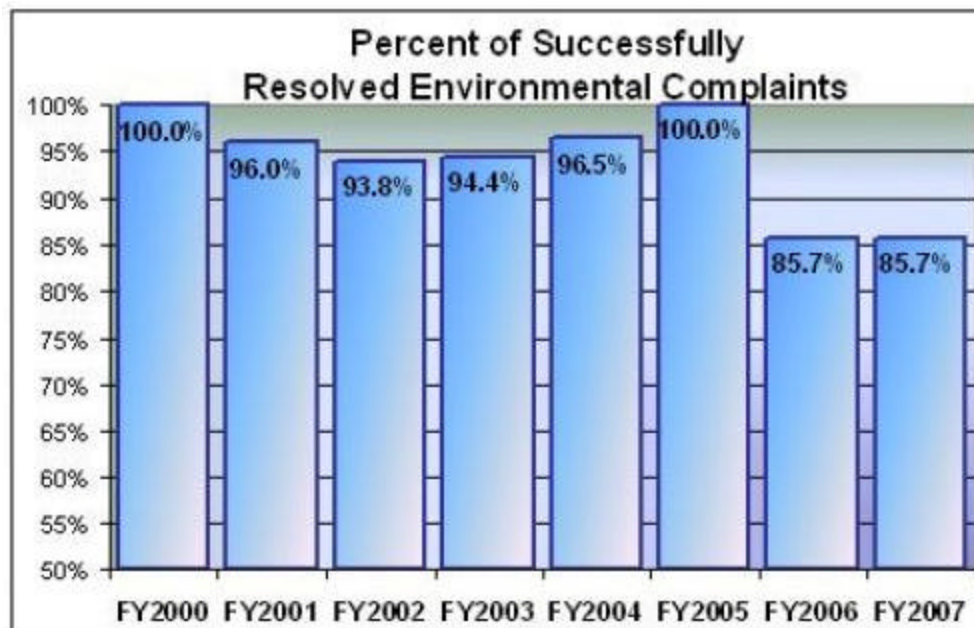
**Analysis of results and challenges:** The statewide single audit is performed annually and results are published upon completion.

There were no audit exceptions in FY2005 or FY2006. The statewide single audit results for FY2007 will not be available until September of 2008.

### A4: Strategy - Investigate criminal violations.

**Target #1:** Criminal violations are investigated and successfully resolved.

**Measure #1:** % of criminal investigations successfully investigated and resolved.



**Analysis of results and challenges:** Normally environmental violations are enforced by ADEC's regulatory

staff through administrative or civil remedies. However, when harmful conduct becomes intentional, knowing, or reckless, criminal enforcement must be considered.

The Environmental Crimes Unit is responsible for investigating the most complex and egregious violations of environmental law. Violators must be identified and sufficient evidence collected in order to successfully resolve an investigation. The effectiveness of this unit can be measured by its ability to successfully resolve a high percentage reported criminal violations.

There were 7 criminal investigations initiated by the Environmental Crimes unit in FY2007. Of those 7 investigations 6 have been resolved. The remaining case was still under investigation at the end of this reporting period, thus the percentage of criminal investigations successfully investigated and resolved for FY2007 is at 85.7%.

Due to the complexities of many of these investigations, they are not resolved in the same fiscal year as reported, but will be resolved in the following fiscal year and will be reflected in the year the violation was received after being resolved.

## Component: Office of the Commissioner

### Contribution to Department's Mission

Provide support and policy direction to the divisions in the department.

### Core Services

- Develop partnerships and work cooperatively with the regulated community and other government and non-governmental stakeholders to protect human health and the environment.
- Lead department employees to accomplish department priorities and performance measures.
- Represent the department's authorities and responsibilities on the Governor's cabinet.
- Work with the legislature on the department's budget and legislative priorities.
- Represent the department's authorities and responsibilities on the Exxon Valdez Trustees Council.
- Adjudicate administrative appeals of department decisions.
- Approve department regulations for public notice and adopt final regulation changes for filing with the Lieutenant Governor.

End Result	Strategies to Achieve End Result
<b>A: The department operates in accordance with the Administration's policies and initiatives.</b>  <u>Target #1:</u> Strategic Plan is 100% implemented by fiscal year 2008. <u>Measure #1:</u> % of Strategic Plan implemented.	<b>A1: Lead development and implementation of Department initiatives.</b>  <u>Target #1:</u> All priority regulatory programs are revised for filing with the Lieutenant Governor's Office. <u>Measure #1:</u> % of completed priority program revisions.

### Major Activities to Advance Strategies

- Lead the department to accomplish goals and communicate performance.
- Lead the development of protective standards.
- Work within the government and with stakeholders, the public and the legislature to communicate department initiatives and needs.

### FY2009 Resources Allocated to Achieve Results

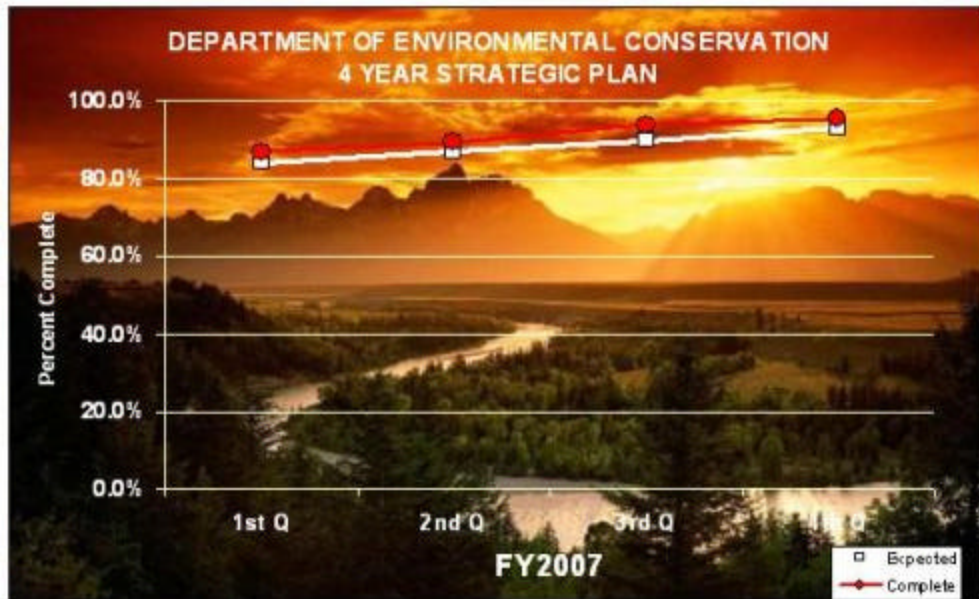
<b>FY2009 Component Budget: \$955,200</b>	<b>Personnel:</b>	
	Full time	8
	Part time	0
	<b>Total</b>	<b>8</b>

## Performance Measure Detail

### A: Result - The department operates in accordance with the Administration's policies and initiatives.

**Target #1:** Strategic Plan is 100% implemented by fiscal year 2008.

**Measure #1:** % of Strategic Plan implemented.



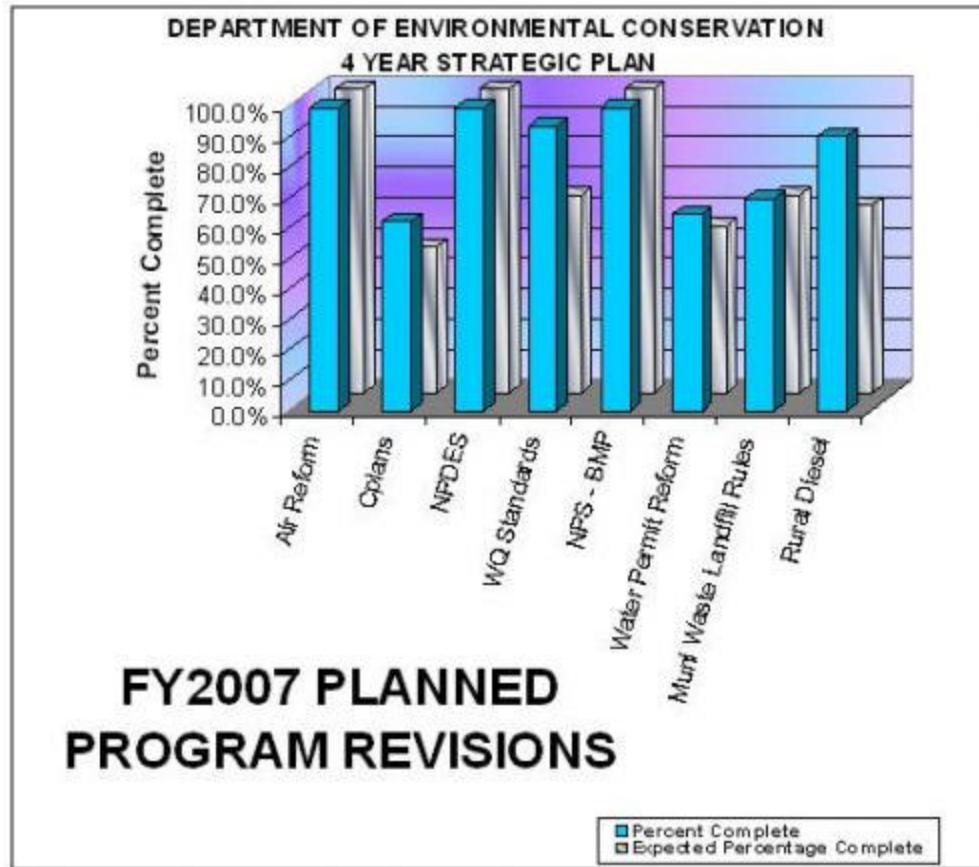
**Analysis of results and challenges:** DEC's strategic framework is based on the premise that, if we fulfill our duties (statutorily mandated) and accomplish our mission, the ultimate result will be that public health and the environment will be protected. We do this by influencing external entities to prevent abate or control pollution through a comprehensive protection program. We don't prevent pollution – we influence others to take preventative action and establish standards by which to measure success.

This measure determines departmental progress against the 4 Year Strategic Plan. Progress is measured against expected results for individual projects, and averaged over the department. Within the strategic plan, performance exceeds expectations.

**A1: Strategy - Lead development and implementation of Department initiatives.**

**Target #1:** All priority regulatory programs are revised for filing with the Lieutenant Governor's Office.

**Measure #1:** % of completed priority program revisions.



**Analysis of results and challenges:** All of the department's highest priority regulation revisions are either on track or have been completed and filed with the Lieutenant Governor.

## Component: Information and Administrative Services

### Contribution to Department's Mission

Provide support services to departmental programs.

### Core Services

- Provide administrative support services to customers and clients of the department.
- Develop and implement sound administrative policies and practices for the department.
- Provide timely and accurate information.
- Minimize risk from operations.
- Enforce protective standards for environmental and sanitary practices.

End Result	Strategies to Achieve End Result
<p><b>A: Administrative activities are in compliance with governing statutes and regulations.</b></p> <p><u>Target #1:</u> 100% of audit exceptions investigated and successfully resolved.</p> <p><u>Measure #1:</u> % of audit exceptions investigated and successfully resolved.</p>	<p><b>A1: Improve availability, quality, and quantity of data for external and internal users.</b></p> <p><u>Target #1:</u> Network is available to employees 7 days a week.</p> <p><u>Measure #1:</u> % of time network is available.</p> <p><b>A2: Ensure compliance with all federal and state requirements.</b></p> <p><u>Target #1:</u> No audit exceptions.</p> <p><u>Measure #1:</u> Number of audit exceptions.</p> <p><u>Target #2:</u> No procurement violations for procurements over \$1,000.</p> <p><u>Measure #2:</u> % of violations as compared with total number of procurements made over \$1,000.</p> <p><b>A3: Investigate criminal violations.</b></p> <p><u>Target #1:</u> Criminal violations are investigated and successfully resolved.</p> <p><u>Measure #1:</u> % of criminal violations investigated and successfully resolved.</p>

### Major Activities to Advance Strategies

- Develop and maintain support services for the department's customers and clients; other agencies, the legislature and department employees.
- Identify departmental training needs and develop training plans.
- Develop enforcement procedures for departmental permitting programs.
- Develop and maintain policies and procedures governing financial, budget, procurement and information systems management.

### FY2009 Resources Allocated to Achieve Results

FY2009 Component Budget: \$4,549,100

**Personnel:**

Full time 48

Part time 0

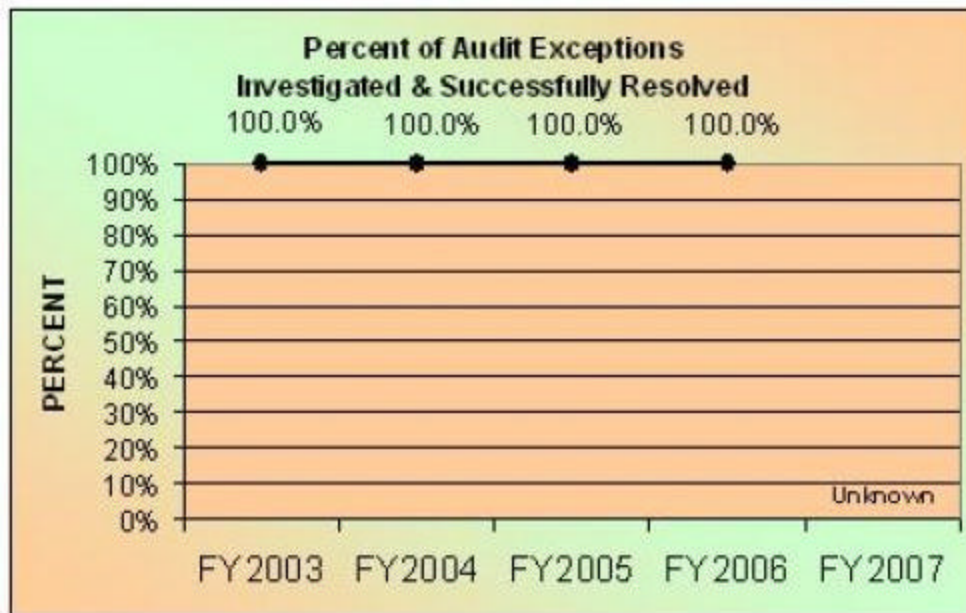
**Total** 48

### Performance Measure Detail

#### A: Result - Administrative activities are in compliance with governing statutes and regulations.

**Target #1:** 100% of audit exceptions investigated and successfully resolved.

**Measure #1:** % of audit exceptions investigated and successfully resolved.



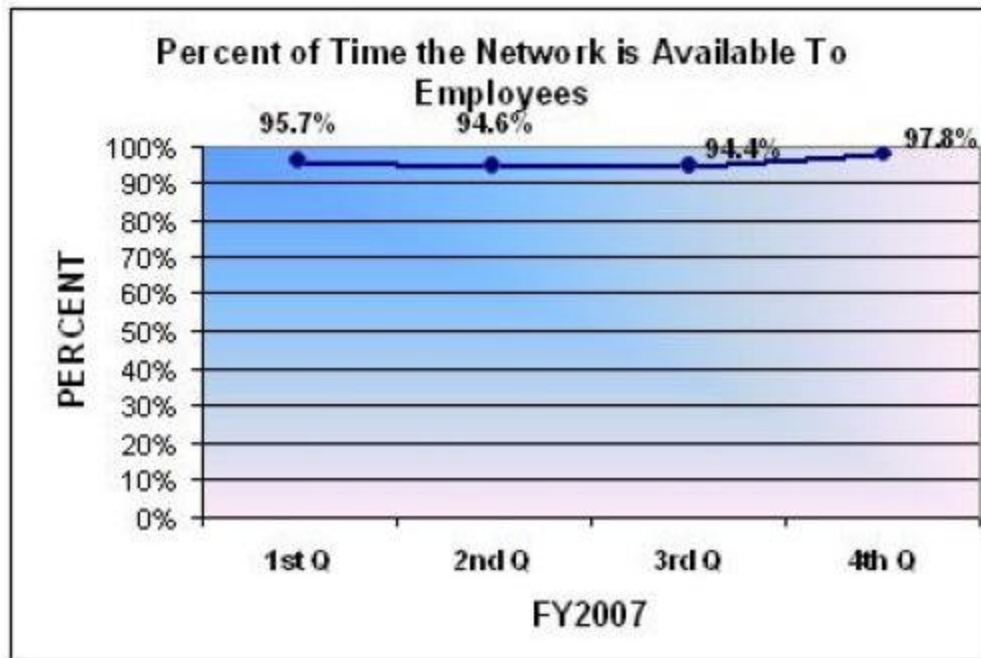
**Analysis of results and challenges:** The statewide single audit is performed annually and results are published upon completion.

There were no new exceptions in FY2005 or FY2006. Additionally, none of the prior years' audit exceptions were restated in the FY2006 results, and all prior years' audit exceptions are considered resolved. The statewide single audit results for FY2007 will not be available until September of 2008.

**A1: Strategy - Improve availability, quality, and quantity of data for external and internal users.**

**Target #1:** Network is available to employees 7 days a week.

**Measure #1:** % of time network is available.

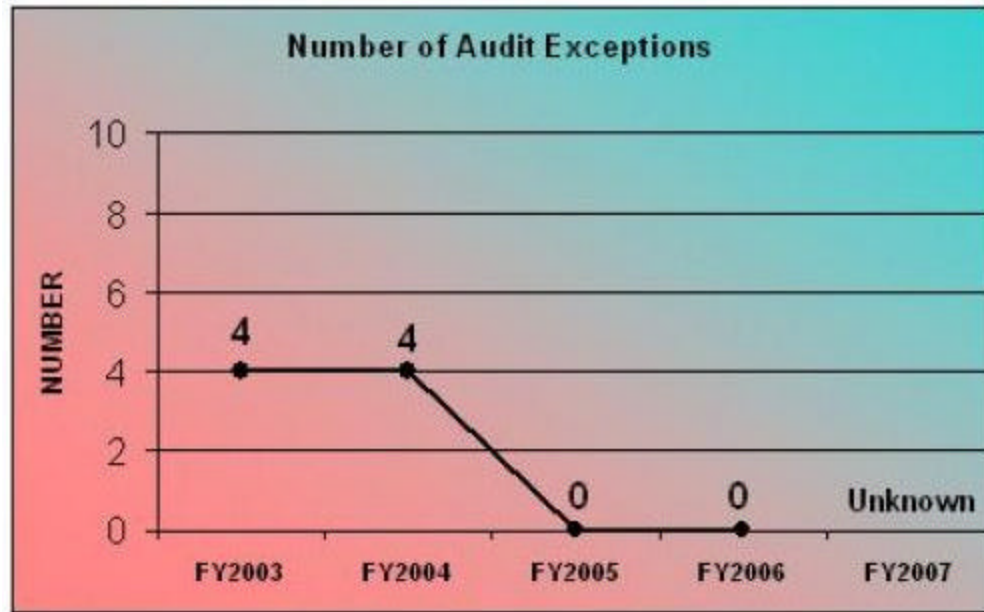


**Analysis of results and challenges:** During the last two quarters of FY2007 the Information Services Section was able to successfully provide network services 7 days a week. The results were based on the uptime of 17 critical department servers providing file and print, mail, and web services. A full day of network downtime was counted any time at least 1 server was down for more than 8 hours. Routine maintenance downtime was limited to short periods during the off hours.

**A2: Strategy - Ensure compliance with all federal and state requirements.**

**Target #1:** No audit exceptions.

**Measure #1:** Number of audit exceptions.

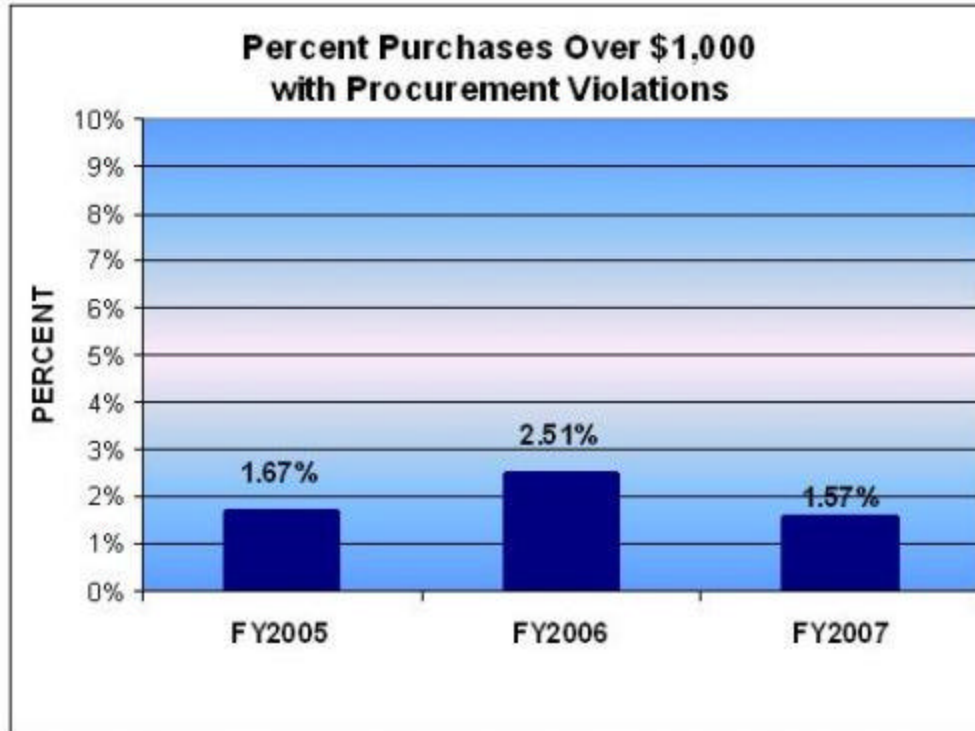


**Analysis of results and challenges:** The statewide single audit is performed annually and results are published upon completion.

There were no new exceptions in FY2005 or FY2006. Additionally, none of the prior years' audit exceptions were restated in the FY2006 results, and all prior years' audit exceptions are considered resolved. The statewide single audit results for FY2007 will not be available until September of 2008.

**Target #2:** No procurement violations for procurements over \$1,000.

**Measure #2:** % of violations as compared with total number of procurements made over \$1,000.



**Analysis of results and challenges:** The goal is to have all procurements over \$1,000 reviewed and processed by procurement staff. In FY2007 - 689 out of 700 procurements over \$1,000 were made without any violations. The department continues to educate and work with staff on procurement processes.

### A3: Strategy - Investigate criminal violations.

**Target #1:** Criminal violations are investigated and successfully resolved.

**Measure #1:** % of criminal violations investigated and successfully resolved.



**Analysis of results and challenges:** Normally environmental violations are enforced by ADEC's regulatory staff through administrative or civil remedies. However, when harmful conduct becomes intentional, knowing, or reckless, criminal enforcement must be considered.

The Environmental Crimes Unit is responsible for investigating the most complex and egregious violations of environmental law. Violators must be identified and sufficient evidence collected in order to successfully resolve an investigation. The effectiveness of this unit can be measured by its ability to successfully resolve a high percentage reported criminal violations.

There were 7 criminal investigations initiated by the Environmental Crimes unit in FY2007. Of those 7 investigations 6 have been resolved. The remaining case was still under investigation at the end of this reporting period, thus the percentage of criminal investigations successfully investigated and resolved for FY2007 is at 85.7%.

Due to the complexities of many of these investigations, they are not resolved in the same fiscal year as reported, but will be resolved in the following fiscal year and will be reflected in the year the violation was received after being resolved.

## Environmental Health Results Delivery Unit

### Contribution to Department's Mission

Safe drinking water, food, and sanitary practices.

### Core Services

- Establish clear standards.
- Apply standards consistently statewide.
- Permit, inspect and provide technical assistance.
- Enforce requirements.

End Result	Strategies to Achieve End Result
<b>A: The environment is protected from solid waste and pesticide pollution.</b>  <u>Target #1:</u> 100% of solid waste facilities are authorized/permitted. <u>Measure #1:</u> % of facilities that are authorized/permitted.	<b>A1: Establish protective standards for Solid Waste and Pesticides.</b>  <u>Target #1:</u> Solid waste regulations are revised, adopted and implemented by FY2008. <u>Measure #1:</u> % of solid waste regulations and standards complete.  <u>Target #2:</u> Pesticide regulations are revised, adopted and implemented by the end of FY2007. <u>Measure #2:</u> % of pesticide regulations and standards complete.
End Result	Strategies to Achieve End Result
<b>B: Citizens are protected from unsafe food and drinking water.</b>  <u>Target #1:</u> No outbreaks of food borne illness in regulated facilities. <u>Measure #1:</u> Number of regulated facilities with food borne outbreaks within the fiscal year.  <u>Target #2:</u> No public illness outbreaks from regulated public water systems. <u>Measure #2:</u> Number of regulated facilities with public illness outbreaks within the fiscal year.	<b>B1: Establish protective standards for food and drinking water.</b>  <u>Target #1:</u> Protective standards for food are complete by the end of FY2007. <u>Measure #1:</u> % of protective standards complete for food.  <b>B2: Control sanitary practices for food and drinking water.</b>  <u>Target #1:</u> 100% plan reviews are processed within specific turn around times. <u>Measure #1:</u> % reviews processed within specific turn around time.  <u>Target #2:</u> 100% of food handlers and sanitary survey inspectors are certified. <u>Measure #2:</u> % of food handlers and sanitary survey inspectors are certified.  <b>B3: Enforce safe sanitary practices for food and</b>

	<p><b>drinking water.</b></p> <p><u>Target #1:</u> Within a fiscal year, less than 10% of regulated facilities have been issued formal enforcement.</p> <p><u>Measure #1:</u> % of regulated facilities issued formal enforcement within the fiscal year.</p>
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### Major Activities to Advance Strategies

- Test and monitor food products for safety.
- Assist food operators to be in compliance with the Alaska Food Code.
- Provide environmental health information by conducting laboratory tests and analysis.
- Develop and maintain foreign animal disease monitoring and surveillance.
- Regulate community water systems.
- Implement a risk-based inspection and compliance plan for landfills.
- Conduct compliance investigations and inspections.
- Enforce environmental health regulatory requirements.
- Investigate complaints and outbreaks.

### FY2009 Resources Allocated to Achieve Results

**FY2009 Results Delivery Unit Budget: \$15,061,200**

**Personnel:**

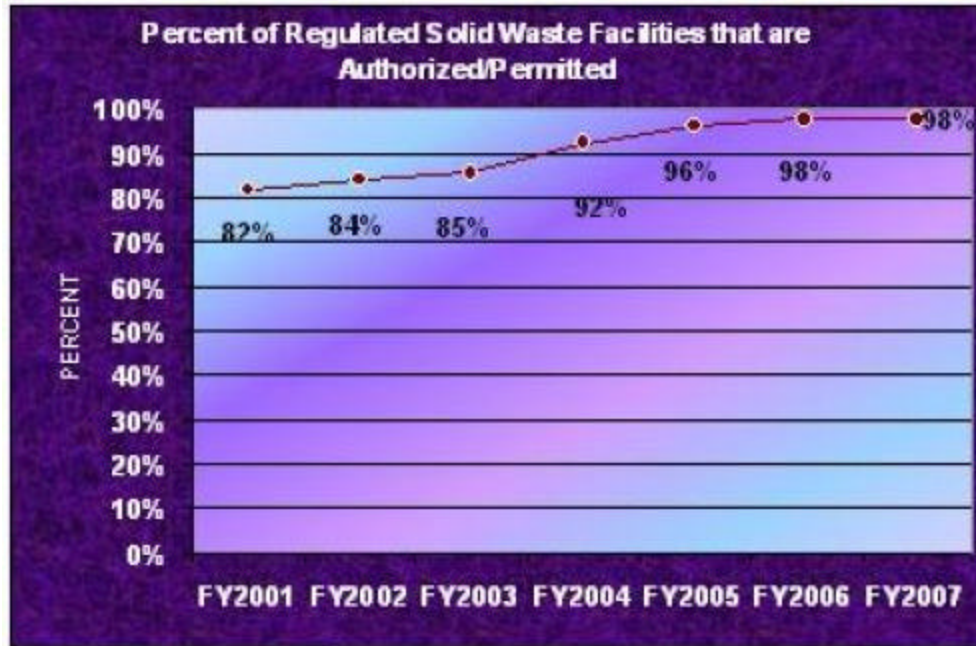
Full time	144
Part time	0
<b>Total</b>	<b>144</b>

## Performance Measure Detail

### A: Result - The environment is protected from solid waste and pesticide pollution.

**Target #1:** 100% of solid waste facilities are authorized/permited.

**Measure #1:** % of facilities that are authorized/permited.

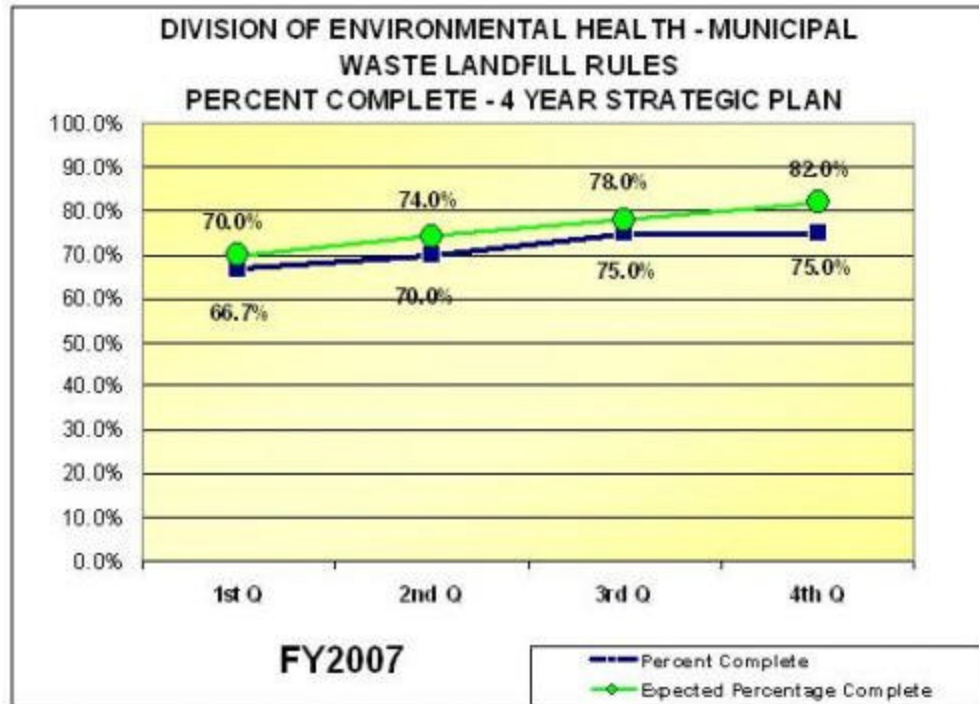


**Analysis of results and challenges:** The Solid Waste Program oversees permitting municipal landfills receiving over 5 tons of waste per day (Class I and Class II landfills) and industrial activities that require permitting. The program tracks the number of Class I, Class II, and industrial permits and the number of facilities requiring permits. All of the facilities requiring a permit are either permitted or in the process of obtaining new permits or renewing the necessary permit.

## A1: Strategy - Establish protective standards for Solid Waste and Pesticides.

**Target #1:** Solid waste regulations are revised, adopted and implemented by FY2008.

**Measure #1:** % of solid waste regulations and standards complete.

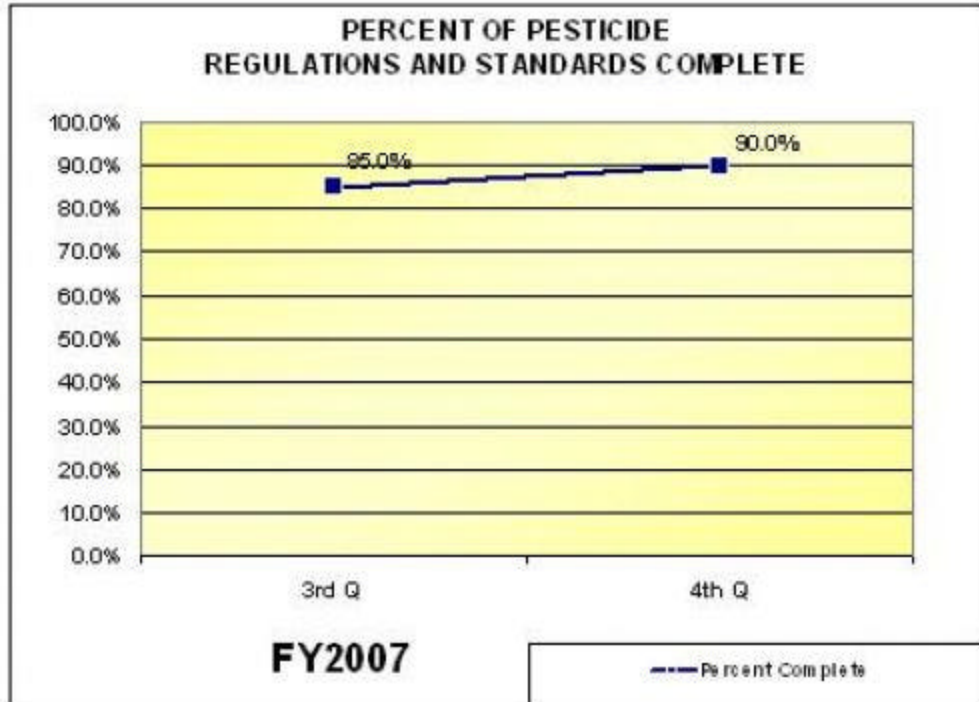


**Analysis of results and challenges:** The solid waste program effectively manages waste disposal in communities that produce more than 5 tons of municipal solid waste per day by issuing individual permits to the landfills serving those communities. Currently, small communities producing less than 5 tons of municipal solid waste per day are also required to have a permit, but only 25% of the Class III communities have permitted landfills. Since the permit process is difficult for small communities with limited resources, a simplified authorization process is needed to improve the permitting rate among small communities. As such, the department is in the process of changing the structure of the solid waste program.

As a first step in this process, legislation was requested and passed in 2004 that gave DEC the ability to authorize disposal activities by regulation (i.e. prior authorization) rather than solely by permit. To utilize this new authority, it is necessary to revise the solid waste regulations. Efforts to revise the regulations have proceeded steadily and a draft package of revised regulations was completed by the end of FY2005. Much of FY2006 was spent on internal review of the draft regulations and revision of the regulations in response to review comments. During FY2007, the Solid Waste Program completed a comprehensive rewrite of the draft package to improve the readability and organization of the regulations. Internal review of the revised draft regulations is underway. Pending approval, the draft regulations will be release for public comment.

**Target #2:** Pesticide regulations are revised, adopted and implemented by the end of FY2007.

**Measure #2:** % of pesticide regulations and standards complete.

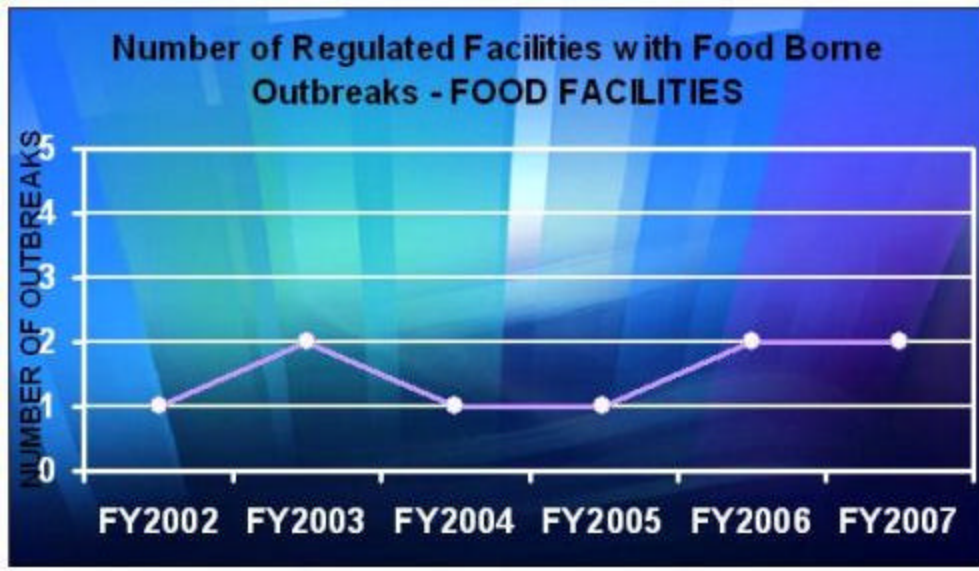


**Analysis of results and challenges:** During the 2004-2005 legislative sessions, the Alaska State Legislature enacted a new law that required the Department of Environmental Conservation to develop regulations to ensure that reasonable, on-site notice is provided prior to the application of pesticides in a public place. Implementing this law requires amending the existing pesticide regulations. The data for this measure began during the third quarter of FY2007, changes were made to the original draft of the regulations in response to public and agency comments and the revised documents were submitted for approval.

## **B: Result - Citizens are protected from unsafe food and drinking water.**

**Target #1:** No outbreaks of food borne illness in regulated facilities.

**Measure #1:** Number of regulated facilities with food borne outbreaks within the fiscal year.



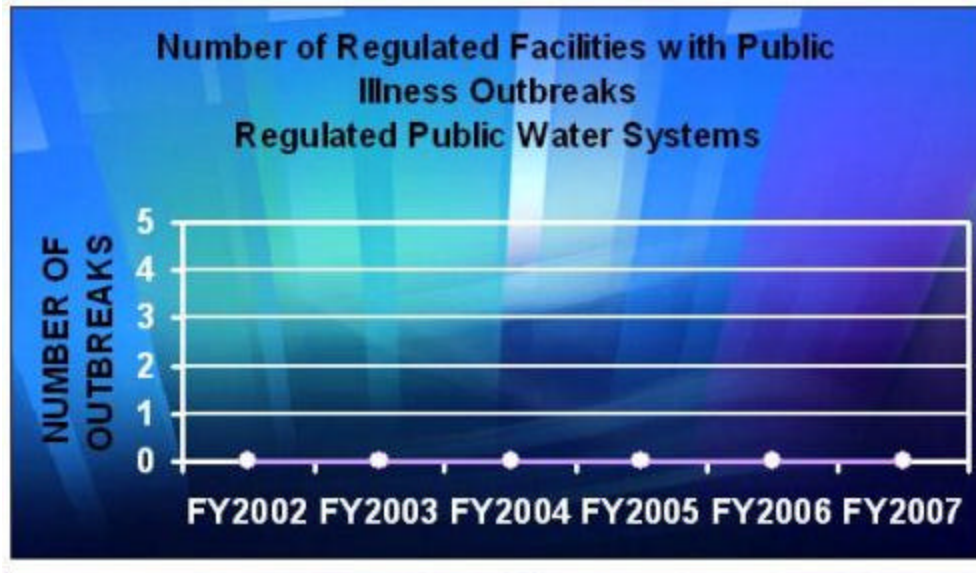
**Analysis of results and challenges:** The Epidemiology section of Health and Social Services (HSS) conducts investigations in the outbreaks of human illness and death with the help of DEC investigators, they determine the source of the outbreak. In coordination with Department of Health and Social Services (DHSS), Environmental Health Officers investigate cases of suspected food borne illness on a routine basis. Investigation requires Food Safety staff to take food case histories and conduct risk focused inspections of regulated food establishments to determine if food preparation, handling, source, or employee health may be the causative or contributing factors for the illness. The measure does not include illness determined through investigation to be a result of norovirus infections associated with food and sanitation practices, or food borne illness which results from consumer mishandling of retail food.

Data displayed here reflects the number of food facilities regulated by DEC, that were determined to be the source of an outbreak during the reporting period. Both outbreaks were a cluster of gastrointestinal illness associated with conferences held at Alaskan hotels.

While we can track those outbreaks reported to HSS, many incidents of illness related to food or drinking water may never actually get reported. In milder cases, symptoms may be mistaken for ordinary flu or an upset stomach and be overlooked by doctors or individuals.

**Target #2:** No public illness outbreaks from regulated public water systems.

**Measure #2:** Number of regulated facilities with public illness outbreaks within the fiscal year.



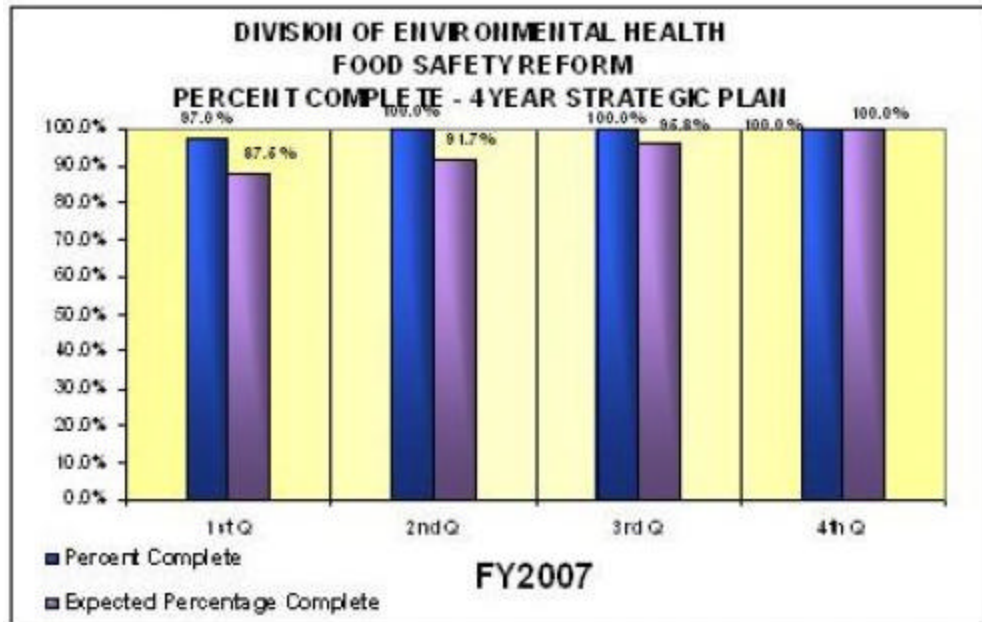
**Analysis of results and challenges:** The Epidemiology section of Health and Social Services (HSS) conducts investigations of outbreaks of human illness and death with the help of DEC investigators, determine the source of the outbreak. Data displayed here reflects the number of regulated public water systems by DEC, that were determined to be the source of an outbreak during the reporting period.

While outbreaks reported to HSS can be tracked, many incidents of illness related to food may never actually get reported. In milder cases, symptoms may be mistaken for ordinary flu or an upset stomach and be overlooked by doctors or individuals.

**B1: Strategy - Establish protective standards for food and drinking water.**

**Target #1:** Protective standards for food are complete by the end of FY2007.

**Measure #1:** % of protective standards complete for food.



**Analysis of results and challenges:** The Food Safety and Sanitation Program has actively been working on revisions to the Alaska Food Code (18 AAC 31) to implement HB378, the bill providing authority to require certified food protection managers and food worker cards in Alaska's regulated food establishments. The program released a draft for public comment on January 12, 2005 and held numerous public workshops to discuss the package. The program received comments from approximately 75 operators regarding employee health, fines for non-compliance, no bare hand contact with ready-to-eat foods, and Active Managerial Control record tracking requirements.

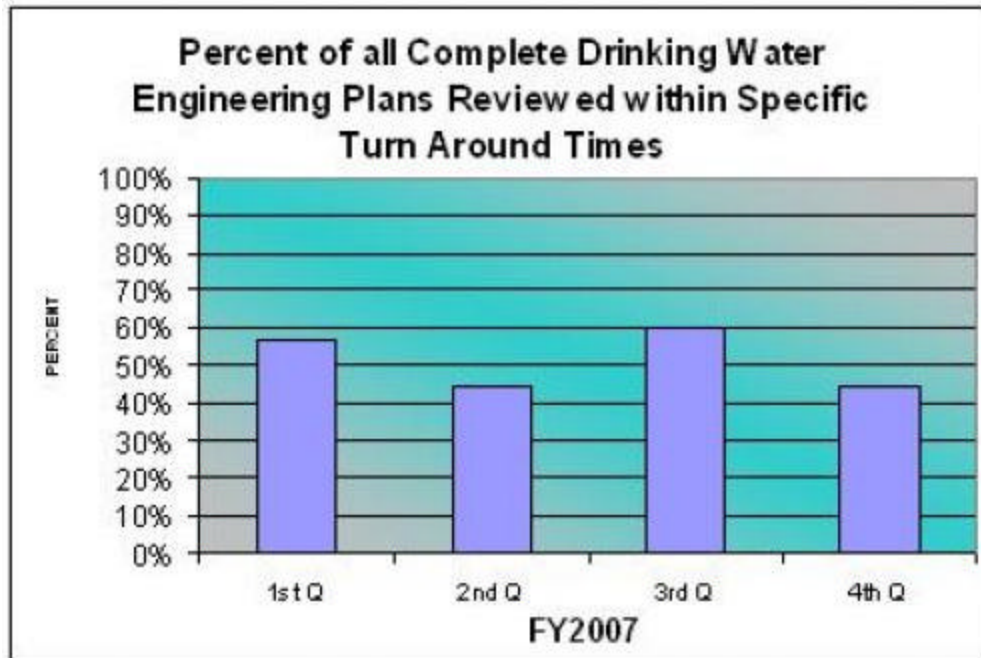
The program made extensive edits based upon public comments. A second public comment period was held April 2, 2006 through June 30, 2006. Four public workshops were held to educate operators and other interested parties about the proposed regulation changes.

The new regulations went into effect on December 28, 2006 and this measure is 100% complete and will be removed at the end of FY2007.

## B2: Strategy - Control sanitary practices for food and drinking water.

**Target #1:** 100% plan reviews are processed within specific turn around times.

**Measure #1:** % reviews processed within specific turn around time.



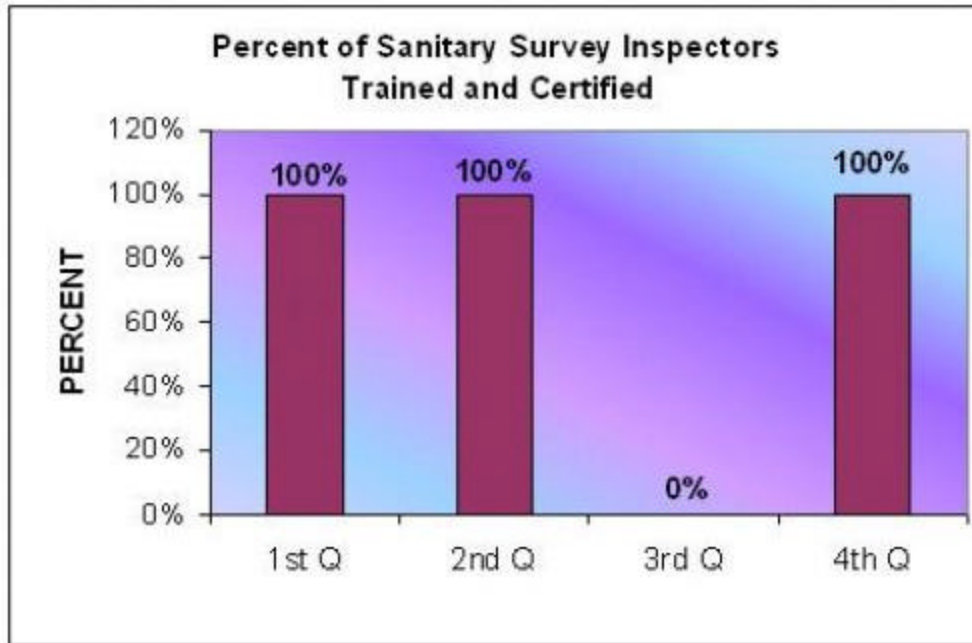
**Analysis of results and challenges:** To provide for the protection of public health, Drinking Water regulations (18 AAC 80) require that any time a public water system (PWS) is constructed or modified, engineered plans be submitted to the Drinking Water Program for review by department engineering staff. During the engineering review process, the engineer will determine if specifications and materials used in the construction or modification of a PWS meet the criteria of the Drinking Water Regulations. These criteria address many items that, taken together, best protect public health and provide safe drinking water. In order to make sure that public water systems are being constructed and operated in a safe manner and are protective of public health, department engineers are required to review complete engineered plan submittals within 30 days of receipt.

Most public water systems by design are complex, with many individual components, including the treatment plant and distribution system that must be reviewed and approved by DEC. Due to the complexity of the systems and the importance of protecting people from waterborne disease, the engineered plan review process is also complex. Some engineered plan submittals do not contain required information needed by department engineers in order to begin the review process. Submitting incomplete engineered plans increases the engineering review process timeline. Continued Department efforts have decreased the number of substantially incomplete engineered plan submittals. Typically, a large number of engineered plans are submitted in the spring, at the beginning of the construction season, creating backlogs that continue into the winter months. During the winter months, submittals decrease and the backlog is reduced.

As new rules become effective through the EPA, they will have an affect on the length of time it takes to review an engineered plan submittal. These new rules would include the recent Long Term 1 and 2 Enhanced Surface Water Treatment Rules and the Disinfectant/Disinfection By-Products, Stage 2 Rule.

**Target #2:** 100% of food handlers and sanitary survey inspectors are certified.

**Measure #2:** % of food handlers and sanitary survey inspectors are certified.



**Analysis of results and challenges:** This measure combines the certification programs within the Food Safety and Drinking Water Programs. The certification of food handlers is part of the new food safety system and will be implemented in FY2008. Following implementation, data for the food handlers will be included in the measure. Current data only includes certification of sanitary survey inspectors.

All federally regulated public water systems are required to conduct a periodic sanitary survey of their entire water system. A sanitary survey is an onsite review of the water source, treatment facilities and equipment, and the operation and maintenance procedures of a public water system. The sanitary survey is used to evaluate the adequacy of the system and helps to determine if it can produce and distribute safe drinking water.

Sanitary surveys are required every three to five years for public water systems using a groundwater source and every three years for public water systems using a surface water source. Most public water systems are very complex, with many individual components that must be inspected during the sanitary survey. The complexity of inspecting the public water system and the protection of public health requires that a person conducting a sanitary survey be knowledgeable in all aspects of drinking water treatment and distribution. This requires extensive and specialized training.

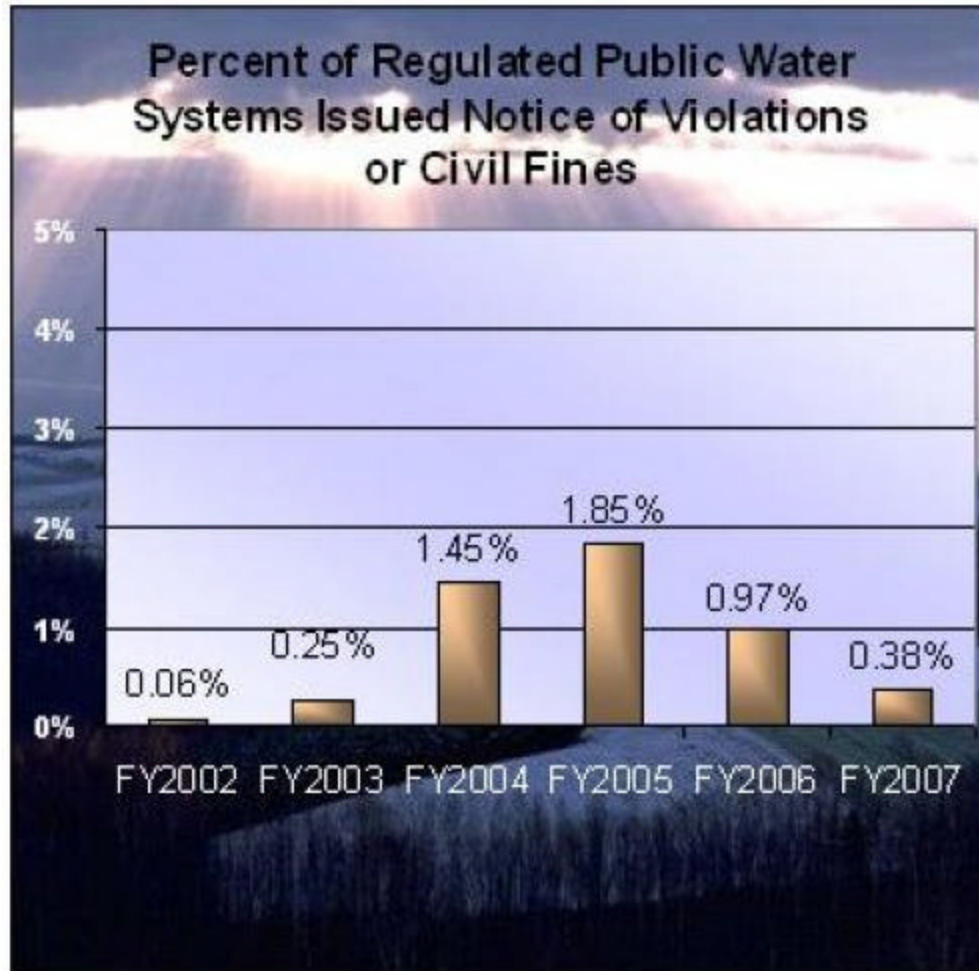
There are approximately 1,600 federally regulated public water systems in Alaska that must meet the sanitary survey requirement. Not all sanitary surveys can be completed by department staff, so the Drinking Water Program has contracted with the University of Alaska Southeast Alaska Training/Technical Assistance Center (ATTAC) to provide training sessions for both department staff and other third party individuals who have prior experience with public water system treatment and distribution. ATTAC currently offers at least three training sessions per year, including one Basic Sanitary Survey training session (5 day class) this year.

The data for the first, second and fourth quarters of FY2007 shows that we have met our goal of 100% certification of sanitary survey inspectors, however the 3rd quarter shows 0%. This was due to having zero sanitary inspectors being certified.

**B3: Strategy - Enforce safe sanitary practices for food and drinking water.**

**Target #1:** Within a fiscal year, less than 10% of regulated facilities have been issued formal enforcement.

**Measure #1:** % of regulated facilities issued formal enforcement within the fiscal year.



**Analysis of results and challenges:** This measure combines enforcement actions for regulated food establishments and regulated public water systems for two enforcement tools Notice of Violation (NOV) and the levy of civil fines and administrative penalties should a regulated entity not comply with standards. The information system to support compliance and enforcement for the new Food Safety Program, Active Managerial Control, is anticipated to be available by FY2008. Current data only includes enforcement actions associated with regulated drinking water systems.

The primary goal of the Drinking Water Program is to make sure that all people who are served by a federally regulated public water system are receiving drinking water that meets health-based standards. Health-based standards are designed to protect people from consuming unsafe drinking water and are enforceable and required for public water systems to be able to serve drinking water to the public. If a public water system does not meet these standards, violations occur and formal enforcement actions are taken against the system. Formal enforcement actions include NOVs, Compliance Orders By Consent and civil fines (administrative penalties). The goal of the Drinking Water Program is to have 100% of public water systems in compliance with health-based standards.

## Component: Food Safety & Sanitation

### Contribution to Department's Mission

Safe food processing, service, and sales.

### Core Services

- Establish standards, permit, inspect, and enforce standards for food processing and food service facilities.
- Establish standards and inspect on a complaint basis certain public facilities for sanitation.
- Provide education and training on the safe handling of food.

End Result	Strategies to Achieve End Result
<b>A: Establishments provide safe food.</b>  <u>Target #1:</u> 100% of inspected retail food establishments operate under Active Managerial Control (AMC). <u>Measure #1:</u> % of inspected retail food establishments operating under AMC.	<b>A1: Protective standards are established for retail food safety.</b>  <u>Target #1:</u> 100% of retail food safety standards are revised by the end of FY2007. <u>Measure #1:</u> % of retail food safety standards revised by the end of FY2007.  <b>A2: Develop information systems and implement program by the end of FY2007.</b>  <u>Target #1:</u> Program implementation complete by the end of FY2007. <u>Measure #1:</u> % of implementation complete by the end of FY2007.  <b>A3: Enforce food safety program.</b>  <u>Target #1:</u> Less than 10% of regulated retail food establishments have been issued Notice of Violation or civil fines within the fiscal year. <u>Measure #1:</u> % of regulated retail food establishments issued Notice of Violation or civil fines within the fiscal year.

### Major Activities to Advance Strategies

- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>• Review plans and specifications for new food establishments.</li> <li>• Inspect medium and high risk seafood and other food processors.</li> <li>• Conduct random inspections and record audits of retail food establishments.</li> <li>• Conduct complaint and outbreak investigations.</li> <li>• Initiate enforcement action as required.</li> <li>• Set sanitation standards for certain public facilities.</li> </ul> | <ul style="list-style-type: none"> <li>• Conduct sanitary surveys of shellfish growing areas.</li> <li>• Monitor shellfish farms and harvesters for <i>Vibrio parahaemolyticus</i>, paralytic shellfish poisoning and other marine toxins and bacteria.</li> <li>• Respond to fires, floods and other disasters.</li> <li>• Detain or destroy contaminated food. Coordinate the recall of food products.</li> <li>• Assist food operators to take more responsibility for food safety.</li> </ul> |
|---|---|

### FY2009 Resources Allocated to Achieve Results

**FY2009 Component Budget: \$3,873,500**

**Personnel:**

Full time 38

Part time 0

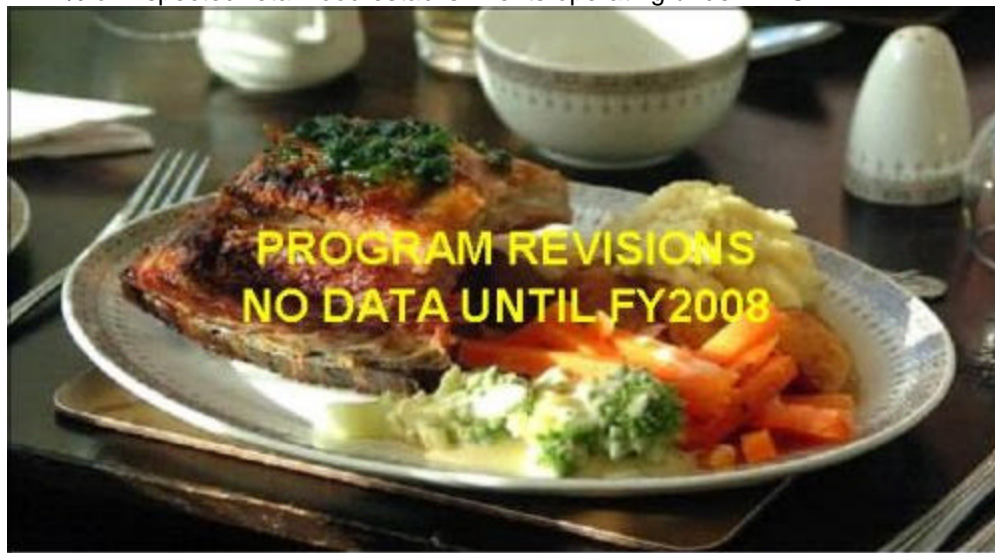
**Total** 38

### Performance Measure Detail

#### A: Result - Establishments provide safe food.

**Target #1:** 100% of inspected retail food establishments operate under Active Managerial Control (AMC).

**Measure #1:** % of inspected retail food establishments operating under AMC.



**Analysis of results and challenges:** The Food Safety Program actively worked on revisions to the Alaska Food Code (18 AAC 31) to implement HB378, the bill providing authority to require a trained workforce which is a pre-requisite for Active Managerial Control. The program released the first draft for public comment on January 12, 2005. A second public comment period was held April 2, 2006 through June 30, 2006. Four public workshops were held to educate operators and other interested parties about the proposed regulation changes. The new regulations went into effect on December 28, 2006.

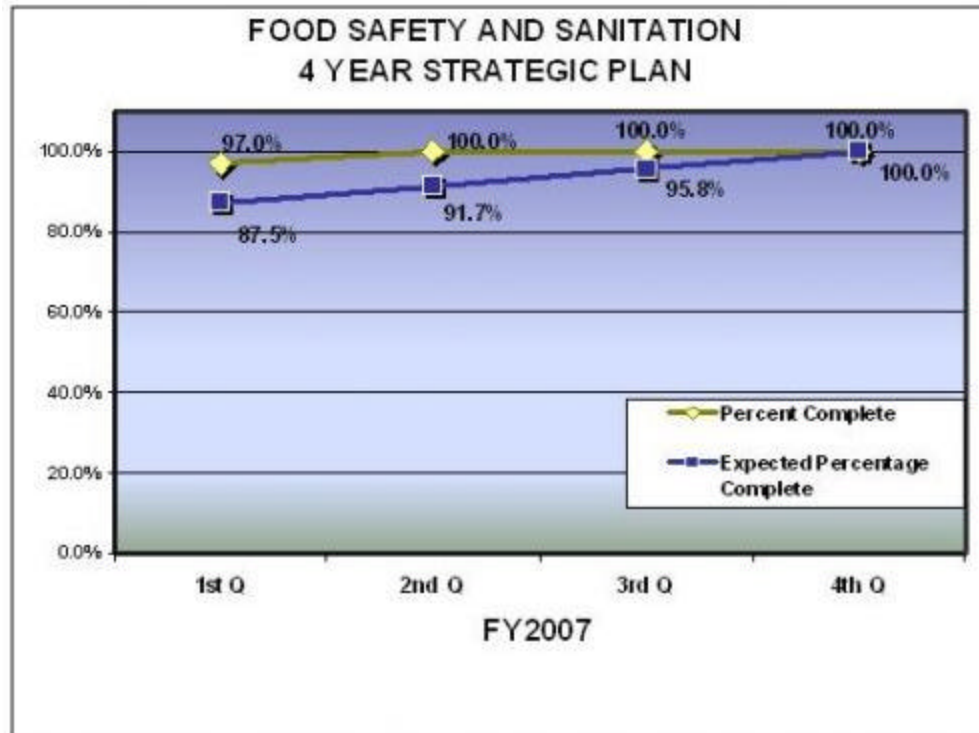
The program continues to test the information system that has been built for permit management and tracking. The food worker training, testing, and card generation component was implemented in January 2007. Food worker training and testing will be available in multiple languages. Approximately 15,000 food worker cards were issued by the end of FY 2007.

Meaningful data regarding the level of compliance will be available in FY2008.

**A1: Strategy - Protective standards are established for retail food safety.**

**Target #1:** 100% of retail food safety standards are revised by the end of FY2007.

**Measure #1:** % of retail food safety standards revised by the end of FY2007.



**Analysis of results and challenges:** The Food Safety and Sanitation Program actively worked on revisions to the Alaska Food Code (18 AAC 31) to implement HB378, the bill providing authority to require certified food protection managers and food worker cards in Alaska's regulated food establishments. The program released a draft for public comment on January 12, 2005 and held numerous public workshops to discuss the package. The program received comments from approximately 75 operators regarding employee health, fines for non-compliance, no bare hand contact with ready-to-eat foods, and Active Managerial Control record tracking requirements.

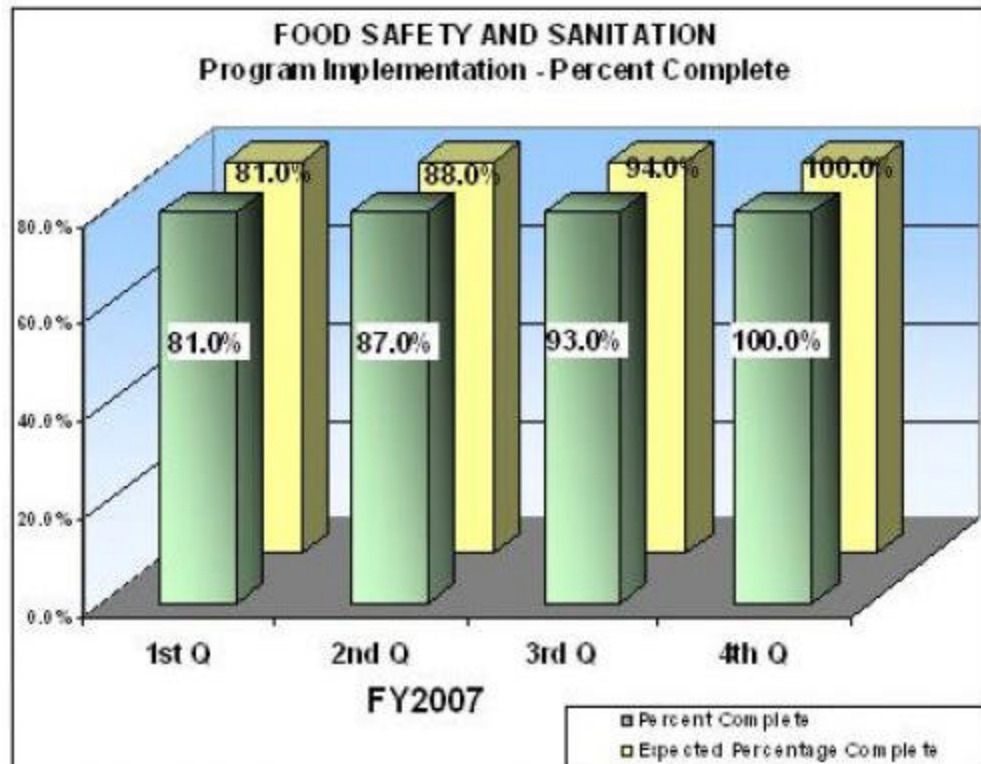
The program made extensive edits based upon public comments. A second public comment period was held April 2, 2006 through June 30, 2006. Four public workshops were held to educate operators and other interested parties about the proposed regulation changes.

The new regulations went into effect on December 28, 2006 and this measure is 100% complete.

## A2: Strategy - Develop information systems and implement program by the end of FY2007.

**Target #1:** Program implementation complete by the end of FY2007.

**Measure #1:** % of implementation complete by the end of FY2007.



**Analysis of results and challenges:** Alaska's new retail food safety system, Active Managerial Control (AMC) is in the development phase. Regulations to facilitate implementation of AMC were adopted on December 28, 2006. These regulations require a trained workforce and encourage operators to implement effective food safety management systems that include written standard operating procedures and self-assessments. Program implementation components were complete by the end of FY2007.

**A3: Strategy - Enforce food safety program.**

**Target #1:** Less than 10% of regulated retail food establishments have been issued Notice of Violation or civil fines within the fiscal year.

**Measure #1:** % of regulated retail food establishments issued Notice of Violation or civil fines within the fiscal year.



**Analysis of results and challenges:** Data regarding the level of compliance with food safety requirements will become available during FY2008; giving operators one year after regulations are final to come into compliance with certain new requirements. Initially, the percent of Notice of Violation's and civil fines may increase as the program is implemented and enforcement actions are initiated. Thereafter, the number of enforcement actions should decline as food operators and establishments more fully integrate Active Managerial Control requirements.

## Component: Laboratory Services

### Contribution to Department's Mission

Provide analytical and technical information in support of state and national environmental health programs.

### Core Services

- Inspect and certify private labs.
- Test food, water, seafood, shellfish, and domestic and wild animals.
- Analyze fish tissue for chemical, microbial, and marine toxin contaminants.
- Permit and inspect dairy and meat producers.
- Permit and monitor the movement of animals and animal vaccines.
- Monitor and control animal diseases.

End Result	Strategies to Achieve End Result
<p><b>A: Information is available for assessment of risks to public health, welfare and the environment.</b></p> <p><u>Target #1:</u> All requested tests are completed.  <u>Measure #1:</u> The % of tests requested that receive results.</p>	<p><b>A1: Provide information relating to risks associated with chemical and biological contaminants.</b></p> <p><u>Target #1:</u> All requested tests for chemical and biological contaminants are complete.  <u>Measure #1:</u> The % of requested tests for contaminants that receive results.</p> <p><b>A2: Provide information relating to risks associated with animal diseases.</b></p> <p><u>Target #1:</u> All requested tests for animal diseases are complete.  <u>Measure #1:</u> The % of requested tests for animal diseases that receive results.</p> <p><b>A3: Provide information relating risks associated with toxins.</b></p> <p><u>Target #1:</u> All requested tests for toxins are complete.  <u>Measure #1:</u> The % of requested tests for toxins that receive results.</p>

### Major Activities to Advance Strategies

- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>• Test shellfish and seafood.</li> <li>• Test food and drinking water samples.</li> <li>• Evaluate fish for persistent organic pollutants.</li> <li>• Test animals.</li> <li>• Review and certify private labs annually.</li> </ul> | <ul style="list-style-type: none"> <li>• Train EH staff on drinking water sampling and testing protocols annually.</li> <li>• Screen and/or inspect dairy farms and processors.</li> <li>• Issue animal health certificates.</li> <li>• Investigate animal disease complaints and outbreaks.</li> </ul> |
|--|---|

### FY2009 Resources Allocated to Achieve Results

**FY2009 Component Budget: \$2,905,900**

**Personnel:**

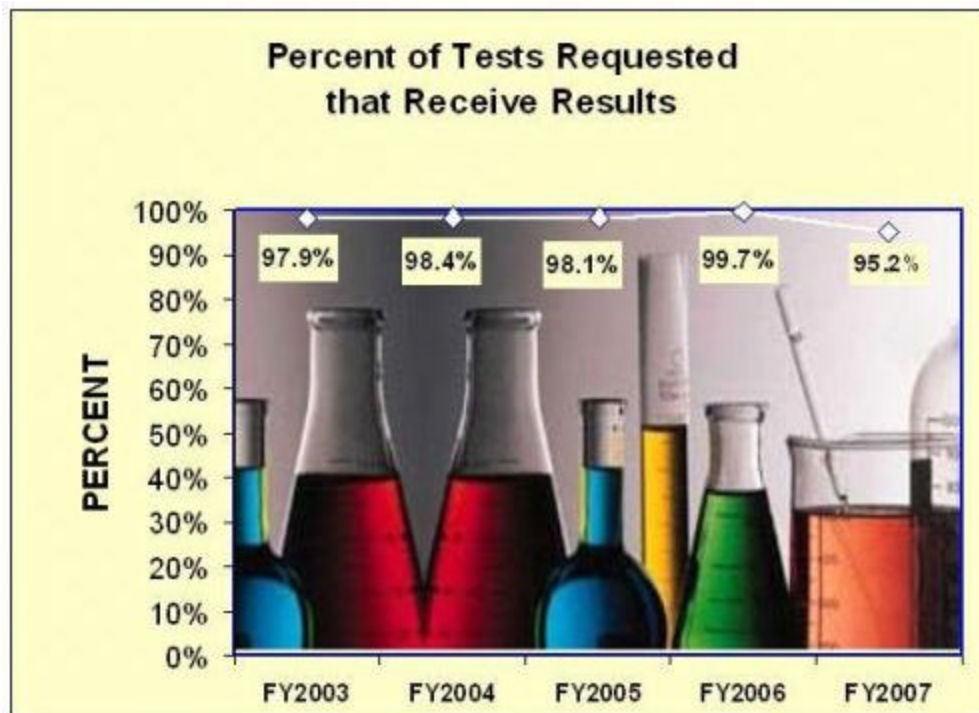
Full time	24
Part time	0
<b>Total</b>	<b>24</b>

### Performance Measure Detail

**A: Result - Information is available for assessment of risks to public health, welfare and the environment.**

**Target #1:** All requested tests are completed.

**Measure #1:** The % of tests requested that receive results.



**Analysis of results and challenges:** The Environmental Health Laboratory's Target is to provide optimal customer service in the form of accurate, timely, and reliable results for 100% of the requests received. In addition to performing both biological and chemical analysis, the laboratory will continue to perform certification inspections for drinking water and environmental testing laboratories throughout the state.

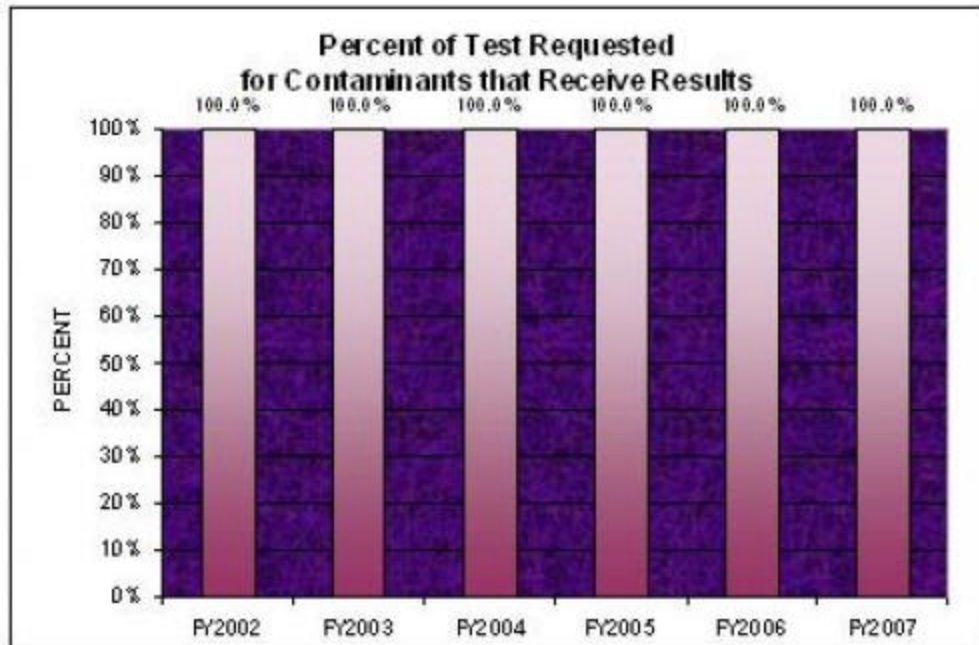
During FY2006 a new state-of-art testing Environmental Health Laboratory with enhanced testing capabilities was constructed. The transition from Palmer to Anchorage was completed in December of 2005. The new facility includes testing labs for seafood toxins, bacteriology, immunology, dairy, animal diagnostics, chemical analysis, and molecular biology. New processes were developed and implemented during FY2006. They included: a Quality Management Program, Safety Program, Security Program, Laboratory Information Management System, Animal Diagnostic Program, and Molecular Biology Program. The lab has developed a Sample Submission Manual that provides guidance on proper sample collection, handling, and shipping, which has been published in hard copy form and also viewable on the department's website at: [http://www.dec.state.ak.us/eh/lab/SubmissionManual/LSM\\_Main.htm](http://www.dec.state.ak.us/eh/lab/SubmissionManual/LSM_Main.htm).

During the 2nd quarter of FY2007 a large batch of samples were received from a client that did not meet acceptable sample criteria. Therefore, this isolated incident caused a decline in the percent of results provided.

### A1: Strategy - Provide information relating to risks associated with chemical and biological contaminants.

**Target #1:** All requested tests for chemical and biological contaminants are complete.

**Measure #1:** The % of requested tests for contaminants that receive results.



**Analysis of results and challenges:** Mercury testing of fish tissues is the primary testing activity for this measure. Because Alaska is a leading producer world wide for seafood, methyl mercury in fish has become a high profile issue. The Division of Environmental Health is the regulatory agency responsible for assuring the safety of commercially harvested fish for national and international markets, as well as subsistence and sport fish consumers.

The toxicity of mercury to man and animals in large doses is well known and has a long history. Mercury is a naturally occurring element and widely distributed in the environment. Ores bearing mercury are mined worldwide and the refined mercury is used in many commercial applications. Mercury is also found in trace quantities in fossil fuels such as coal and released into the environment when burned. With the advancement of science and refined measuring techniques for mercury, trace amounts were detected in the environment but more importantly, found in the water and food that we consume.

Mercury that enters the food chain is of particular concern due to its more toxic organic form as methyl mercury. The more toxic compound is formed when bacteria, for unknown reasons, convert elemental mercury to methyl mercury. Once this conversion to methyl mercury takes place the mercury is now in a form that is known to bioaccumulate. This bioaccumulation factor becomes significant among predatory fish and animals, with man being the top predator in the food chain.

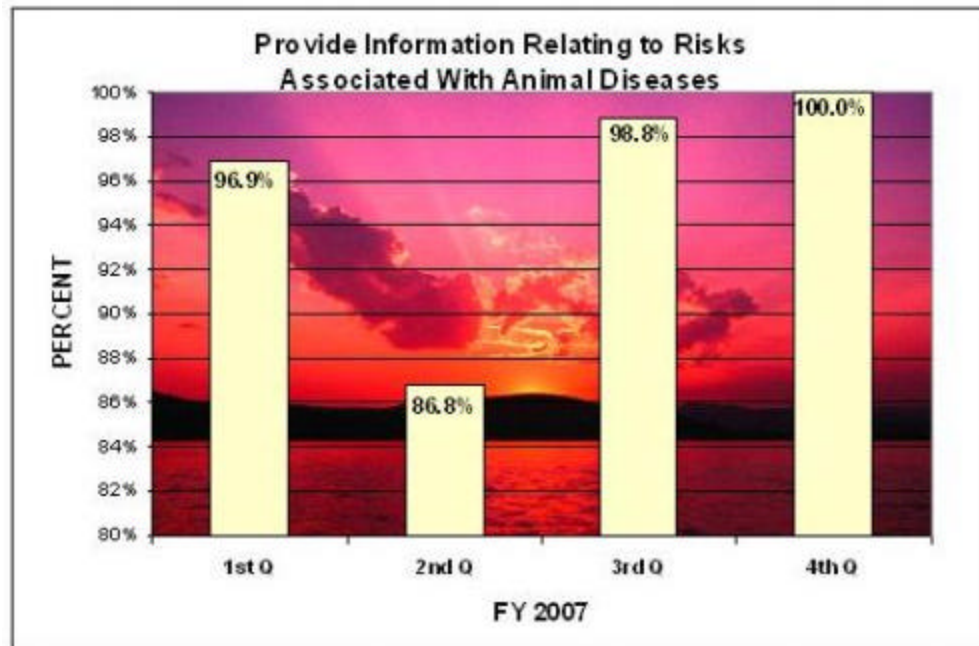
The significance of methyl mercury in fish became a concern more than 30 years ago. The US Food and Drug Administration set a regulatory level of 1ppm (part per million) for fish entering commerce. At the time this was considered a safe level for food consumption. Recent studies by the World Health Organization, US Environmental Protection Agency and private organizations indicate that the 1ppm level may not protect all segments of the population, particularly children, expectant mothers and women of child bearing age who consume fish on a regular basis.

Although there is little that can be done from the regulatory standpoint to eliminate the methyl mercury issue, it is the Division of Environmental Health's responsibility to provide information through laboratory testing that will identify problems if lower regulatory levels are imposed. The accumulation of methyl mercury data for all species of fish will also allow consumers to make informed choices for consumption of Alaska fish. The Division's Environmental Health Laboratory began collecting data in 1997 and is gradually expanding its data base on the many fish indigenous to Alaska, both freshwater and saltwater species. As this data becomes available, it is viewable to the public on the Division's web page: <http://www.dec.state.ak.us/eh/vet/fish.htm>.

## **A2: Strategy - Provide information relating to risks associated with animal diseases.**

**Target #1:** All requested tests for animal diseases are complete.

**Measure #1:** The % of requested tests for animal diseases that receive results.



**Analysis of results and challenges:** This strategy provides the State of Alaska with the initial framework to monitor farm animals and wildlife for emerging diseases. Subsequent to the first reported case of "mad cow" disease in the United States, it has become more critical for the State Environmental Health Laboratory to develop the capability to test for various Transmissible Spongiform Encephalopathy (TSEs). Currently the Laboratory has been certified by USDA to perform Avian Influenza testing on samples collected from birds.

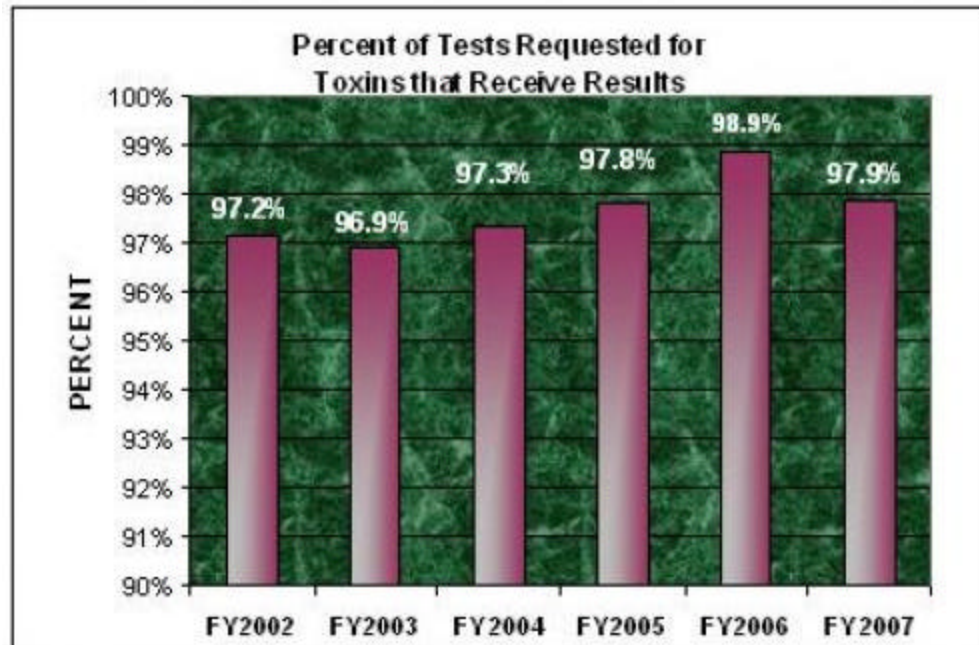
More animal tissue examination and molecular testing using DNA amplification will be possible in the future. It is expected that this testing scheme will be expanded from Chronic Wasting Disease (CWD) surveillance in wild game to Bovine Spongiform Encephalopathy (BSE) "mad cow" and Scrapie Disease surveillance in domestic animals.

This testing contributes to the strategy of providing information relating to risks associated with animal diseases. These numbers include a high number of samples (81 in the 1st quarter and 322 in the 2nd quarter of FY07) that were received in the lab, but were unacceptable for testing due to the sample condition (hemolyzed). The lab has developed a Sample Submission Manual that provides guidance on proper sample collection, handling, and shipping, which has been published in hard copy form and also viewable on the department's website at: [http://www.dec.state.ak.us/eh/lab/SubmissionManual/LSM\\_Main.htm](http://www.dec.state.ak.us/eh/lab/SubmissionManual/LSM_Main.htm).

**A3: Strategy - Provide information relating risks associated with toxins.**

**Target #1:** All requested tests for toxins are complete.

**Measure #1:** The % of requested tests for toxins that receive results.



**Analysis of results and challenges:** Paralytic Shellfish Poison (PSP) toxins are toxins produced by microscopic organisms that accumulate in shellfish through their natural feeding processes. These toxins affect humans, other mammals, and possibly birds when toxic shellfish are ingested. There is no known antidote once a person has ingested shellfish containing these toxins, nor is there any way of knowing, just from looking, whether or not a particular shellfish is toxic. If the person can be diagnosed soon enough after presenting with symptoms and can be placed on a respirator, the body will eventually cleanse itself of the toxins. The current method for detecting and quantifying these toxins is the mouse bioassay using extracts prepared by an AOAC (Association of Official Analytical Chemists) approved method. A chemistry procedure using High Pressure Liquid Chromatography (HPLC) was recently approved by AOAC and will become the new method of choice at the Environmental Health Laboratory in Anchorage.

Using a graduated uniform sampling plan, shellfish from commercial shellfish growing areas are routinely tested for these toxins. Since the department started the testing program in the early 1980's, no known illnesses have occurred from commercially harvested Alaskan grown shellfish.

All samples submitted to the laboratory are assigned a number and nearly all samples are tested. Although the intent is to test 100% of the samples received, occasionally samples are submitted in a decomposed condition that prevents testing; or the submitter will request that the sample not be tested for a variety of reasons. These factors account for a percent completion being less than 100%.

## Component: Drinking Water

### Contribution to Department's Mission

Verify safe drinking water.

### Core Services

- Maintain state primacy for regulating public drinking water systems.
- Enforce public water system (PWS) monitoring requirements for drinking water contaminants.
- Review construction, installation, and operation plans for PWS to protect public health.
- Assist PWS owners in identifying the sources of their drinking water and help them develop strategies to effectively protect those sources from contamination.
- Provide technical and compliance assistance to PWS owners and operators, and the public.

End Result	Strategies to Achieve End Result
<p><b>A: Drinking water is safe.</b></p> <p><u>Target #1:</u> Increase the % of drinking water engineering plans that can be approved within 30 days from initial receipt.</p> <p><u>Measure #1:</u> Change in the % of plans that can be approved within 30 days from initial receipt.</p> <p><u>Target #2:</u> 100% of the population served by public water systems (PWS) in compliance with health-based standards.</p> <p><u>Measure #2:</u> % of the population served by public water systems (PWS) in compliance with health-based standards.</p>	<p><b>A1: Timely review of all complete drinking water engineering plans submitted.</b></p> <p><u>Target #1:</u> Review all complete submissions of drinking water engineering plans within a 30 day time frame.</p> <p><u>Measure #1:</u> % of all complete plans reviewed within 30 days of receipt.</p> <p><b>A2: Implement sanitary survey requirements for all federally regulated public water systems.</b></p> <p><u>Target #1:</u> 100% of public water systems file required sanitary surveys according to schedule.</p> <p><u>Measure #1:</u> % of public water systems in compliance with their sanitary survey schedule.</p> <p><b>A3: Train and certify third party sanitary survey inspectors.</b></p> <p><u>Target #1:</u> 100% of the sanitary survey inspectors are trained and certified.</p> <p><u>Measure #1:</u> % of the sanitary survey inspectors trained and certified.</p>

### Major Activities to Advance Strategies

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>• Conduct reviews for construction, operation, and separation distance waivers.</li> <li>• Review reports provided to consumers by PWS about sampling results.</li> <li>• Process variances and exemptions to reduce the number of PWS significantly out of compliance.</li> <li>• Respond to PWS noncompliance with enforcement actions and make referrals to EPA when appropriate.</li> </ul> | <ul style="list-style-type: none"> <li>• Conduct sanitary surveys of PWS and certify third party sanitary survey inspectors.</li> <li>• Adopt and implement federal drinking water rules.</li> <li>• Submit timely primacy applications to EPA for all federal rules adopted.</li> <li>• Provide technical assistance about wellhead protection to communities.</li> <li>• Review PWS sampling, monitoring, and reporting</li> </ul> |
|--|--|

### Major Activities to Advance Strategies

- Help PWS owners prepare Emergency Response Plans and perform security audits on their water systems. activities for all regulated drinking water contaminants.

### FY2009 Resources Allocated to Achieve Results

**FY2009 Component Budget: \$5,955,200**

**Personnel:**

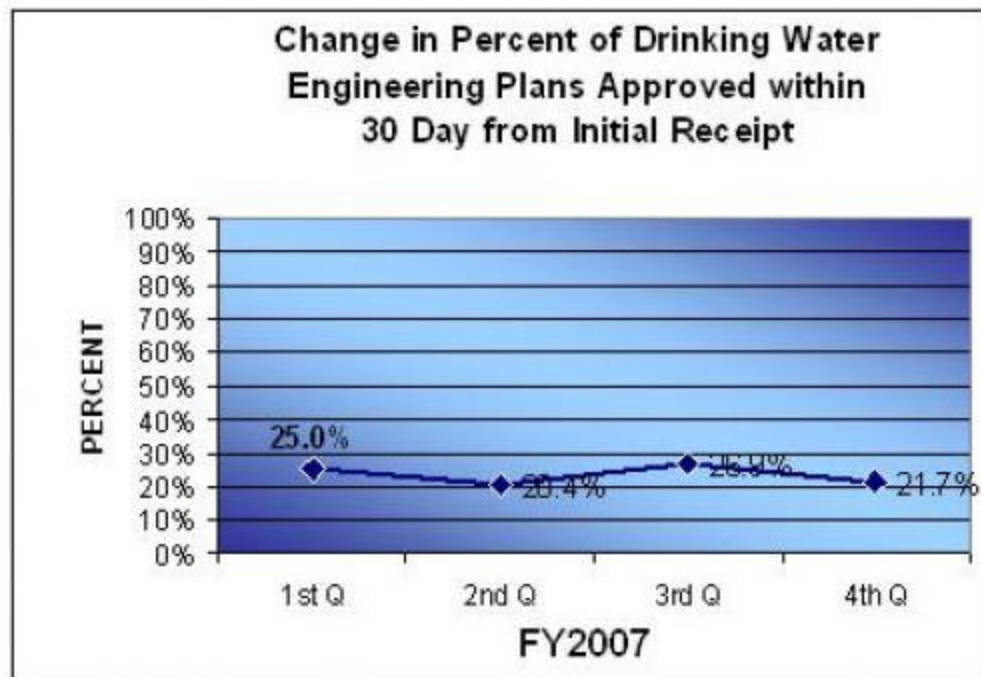
Full time	57
Part time	0
<b>Total</b>	<b>57</b>

### Performance Measure Detail

#### A: Result - Drinking water is safe.

**Target #1:** Increase the % of drinking water engineering plans that can be approved within 30 days from initial receipt.

**Measure #1:** Change in the % of plans that can be approved within 30 days from initial receipt.



**Analysis of results and challenges:** To provide for the protection of public health, Drinking Water regulations (18 AAC 80) require that any time a public water system (PWS) is constructed or modified, engineered plans be submitted to the Drinking Water Program for review by department engineering staff. During the engineering review process, the engineer will determine if specifications and materials used in the construction or modification of a PWS meet the criteria of the Drinking Water Regulations. These criteria address many items that, taken together, best protect public health and provide safe drinking water. In order to make sure that public water systems are being constructed and operated in a safe manner and are protective of public health, department engineers are required to review complete engineered plan submittals

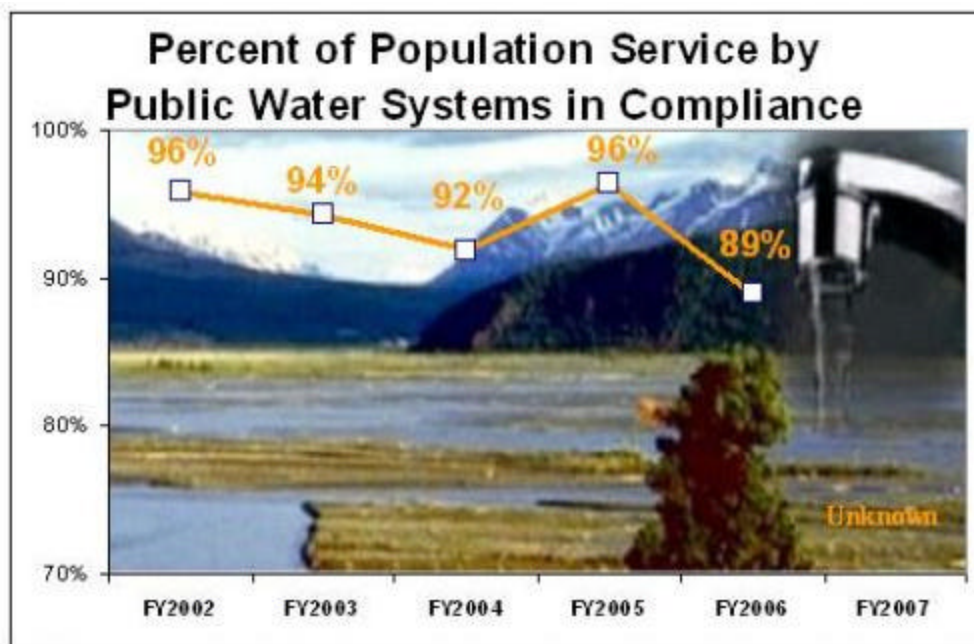
within 30 days of receipt.

Most public water systems by design are complex, with many individual components, including the treatment plant and distribution system that must be reviewed and approved by DEC. Due to the complexity of the systems and the importance of protecting people from waterborne disease, the engineered plan review process is also complex. Some engineered plan submittals do not contain required information needed by department engineers in order to begin the review process. Submitting incomplete engineered plans increases the engineering review process timeline. Continued Department efforts have decreased the number of substantially incomplete engineered plan submittals. Typically, a large number of engineered plans are submitted in the spring, at the beginning of the construction season, creating backlogs that continue into the winter months. During the winter months, submittals decrease and the backlog is reduced.

As new rules become effective through the EPA they will have an affect on the length of time it takes to review an engineered plan submittal. These new rules would include the recent Long Term 1 and 2 Enhanced Surface Water Treatment Rules and the Disinfectant/Disinfection By-Products, Stage 2 Rule.

**Target #2:** 100% of the population served by public water systems (PWS) in compliance with health-based standards.

**Measure #2:** % of the population served by public water systems (PWS) in compliance with health-based standards.



**Analysis of results and challenges:** To address the threat of waterborne disease and provide for the protection of public health, the State of Alaska has adopted the Safe Drinking Water Act (SDWA) requirements and the Drinking Water Program is responsible for the implementation of the SDWA within the State. All federally regulated public water systems are required to be in compliance with the SDWA. Various health-based standards contained within the SDWA are designed to protect people from consuming unsafe drinking water. Health-based standards are EPA established limits for many chemical and radiological contaminants, called Maximum Contaminant Levels (MCL's), as well as microbiological contaminants. The MCL is an enforceable standard that all public water systems must meet in order to serve drinking water to the public. There are also various Treatment Technique criteria that public water systems must meet. Treatment Techniques have to do with the way water is treated to make it potable and safe for human consumption. All of these criteria make up the health-based standards.

The Drinking Water Program continues to offer compliance and technical assistance to all public water system operators and owners to help them remain in compliance with all of the health-based standards that apply to their systems. The Drinking Water Program also has various enforcement strategies in place to require that

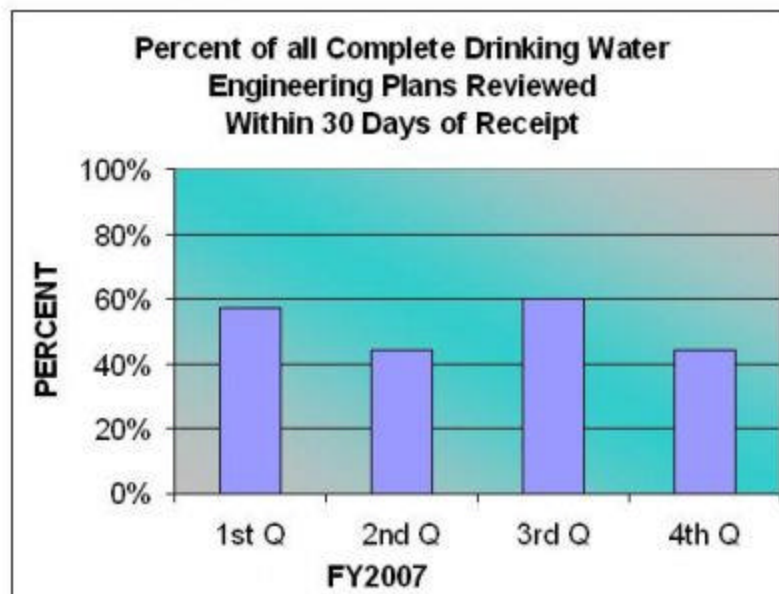
public water systems remain in compliance with the health-based standards. This two-pronged approach to compliance assistance and enforcement allows the Drinking Water Program staff appropriate oversight of the Public Water System serving safe drinking water to as many people as possible. Additionally the increasing number of complex federal drinking water rules such as Long Term 1 and 2 Enhanced Surface Water Treatment Rules and the Disinfectant/Disinfection By-Products, Stage 2 Rule challenges the resources of both the Drinking Water Program and the Public Water System owners and operators. This is why we have seen a decrease in percentage from the previous year (FY06).

The Drinking Water Program is unable to report on this measure quarterly as in previous years, because this information is compiled and distributed by USEPA and the reporting frequency has been reduced to an annual federal fiscal year basis. The FY2007 percentage of the population of Alaska served by public water systems that meet all health-based standards will be available after October 1, 2007.

### **A1: Strategy - Timely review of all complete drinking water engineering plans submitted.**

**Target #1:** Review all complete submissions of drinking water engineering plans within a 30 day time frame.

**Measure #1:** % of all complete plans reviewed within 30 days of receipt.

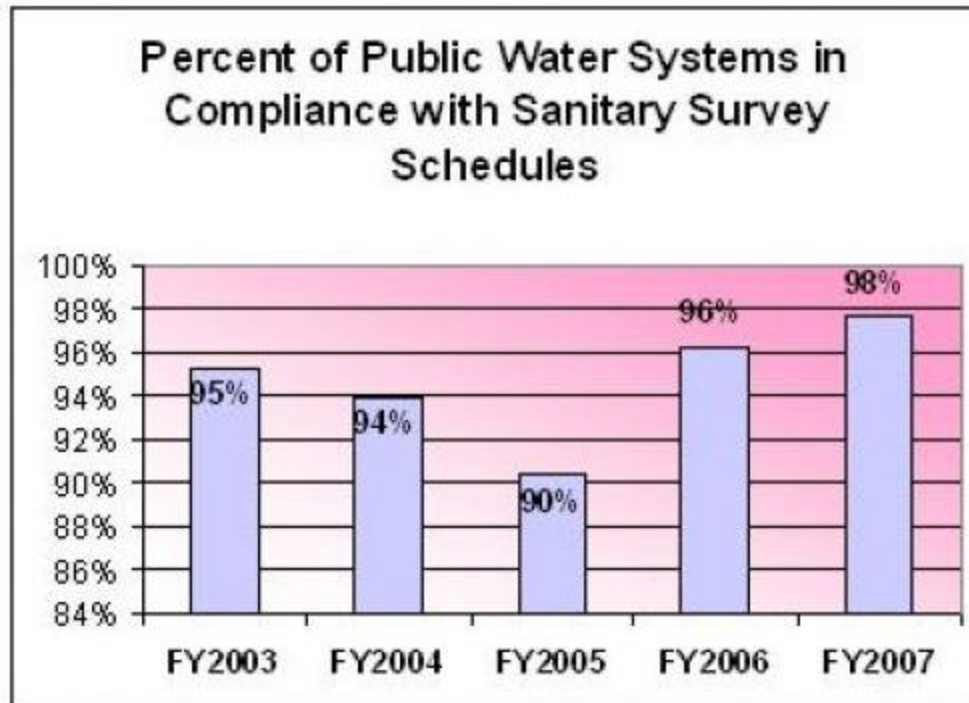


**Analysis of results and challenges:** To provide for the protection of public health, Drinking Water Regulations (18 AAC 80) require that any time a public water system (PWS) is constructed or modified that engineered plans be submitted to the Drinking Water Program for review by department engineering staff. During the engineered plan review process, the department engineer will determine if specifications and materials used in the construction or modification of a PWS meet criteria of the Drinking Water Regulations. These criteria address many items that, taken together, assure that the public is being served safe drinking water. In order to make sure that public water systems are being constructed and operated in a safe manner and are protective of public health, department engineers are required to review complete engineered plan submittals within 30 days of receipt. The fluctuation in percentage was due to the Drinking Water Program engineering staff turn over and recruitment difficulty.

## A2: Strategy - Implement sanitary survey requirements for all federally regulated public water systems.

**Target #1:** 100% of public water systems file required sanitary surveys according to schedule.

**Measure #1:** % of public water systems in compliance with their sanitary survey schedule.



**Analysis of results and challenges:** As part of the 1986 Amendments to the Safe Drinking Water Act, the EPA promulgated the Total Coliform Rule (TCR) which was adopted by the State in 1993. The TCR is the primary health-based regulation used to require all public water systems to routinely monitor for bacteriological contamination in the drinking water they serve to the public. Since most waterborne disease outbreaks are caused by bacteria or other microorganisms, routinely testing for bacteriological contaminants is one of the best ways we have of making sure that drinking water is safe to drink. Another very important part of the TCR is the requirement that all federally regulated public water systems have a periodic sanitary survey completed for their entire water system. A sanitary survey is an onsite review of the water source, treatment facilities and equipment, and the operations and maintenance procedures of a public water system. The sanitary survey process is used to evaluate the adequacy of a system and helps to determine if they are producing and distributing safe drinking water. Sanitary surveys are required every three to five years for public water systems using a groundwater source and every three years for public water systems using a surface water source. Many systems using groundwater as a source are required to have a sanitary survey every three years; however most Alaska systems using groundwater as a source are required to have a survey every five years. Systems using surface water as a source are required to have a sanitary survey every three years.

In the fourth quarter of FY2007 a total of 1,583 public water systems had a sanitary survey scheduled requirement. Of that total, 1,537 public water systems had their scheduled sanitary survey completed or were current with their sanitary survey requirements. This number reflects an 98% compliance rate with the sanitary survey requirement for FY2007.

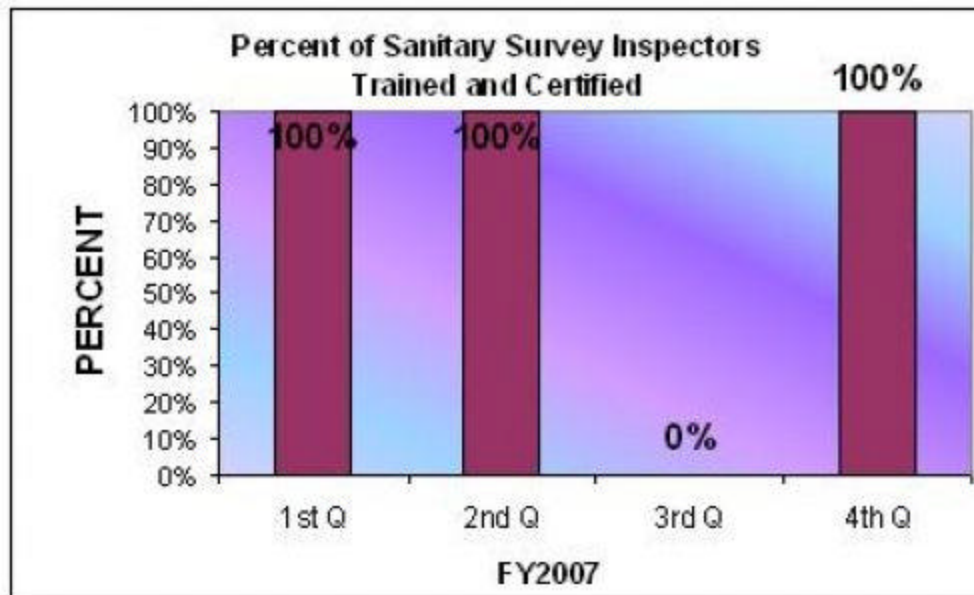
While a 98% compliance rate with the sanitary survey scheduled requirement is good, it does fall below the target rate of 100% of the population being served by a public water system in compliance with health-based standards. Since the sanitary survey scheduled requirement is one of the most important health-based standards, conducting timely sanitary surveys is one of the priority goals of the Drinking Water Program. Some of the challenges we face in meeting this goal are; remote location and difficulty getting to some of the public water systems, cost to the system of conducting the sanitary survey, and the lack of sufficient and

timely enforcement actions to establish/confirm the high priority of sanitary surveys. The Drinking Water Program continues to address these challenges by having the Program's Environmental Programs Specialists and Environmental Engineers trained and certified, as well as ADEC-approved third party sanitary survey inspectors. Most ADEC-approved sanitary survey inspectors schedule and conduct sanitary survey inspections for public water systems.

### A3: Strategy - Train and certify third party sanitary survey inspectors.

**Target #1:** 100% of the sanitary survey inspectors are trained and certified.

**Measure #1:** % of the sanitary survey inspectors trained and certified.



**Analysis of results and challenges:** All federally regulated public water systems are required to have a periodic sanitary survey completed for their entire water system. A sanitary survey is an onsite review of the water source, treatment facilities and equipment, and operation and maintenance procedures of a public water system. The sanitary survey is used to evaluate the adequacy of the system and helps to determine if they can produce and distribute safe drinking water.

Sanitary surveys are required every three to five years for public water systems using a groundwater source and every three years for public water systems using a surface water source. Most public water systems are very complex, with many individual components that must be inspected during the sanitary survey. The complexity of inspecting the public water system and the protection of public health requires that a person conducting a sanitary survey be knowledgeable in all aspects of drinking water treatment and distribution. This requires extensive and specialized training.

There are approximately 1,600 federally regulated public water systems in Alaska that must meet the sanitary survey requirement. Not all sanitary surveys can be conducted by department staff, so the Drinking Water Program has partnered with the University of Alaska Southeast, the Alaska Training/Technical Assistance Center (ATTAC), to provide training sessions for both DEC staff and other non DEC (third party) individuals who have prior experience with public water system treatment and distribution process. ATTAC completed one Basic Sanitary Survey training session (5 day class) this year.

The data for the first, second, and fourth quarters of FY2007 shows that we have met our goal of 100% certification of sanitary survey inspectors, however the 3rd quarter shows 0%. This was due to having zero sanitary inspectors being certified.

## Component: Solid Waste Management

### Contribution to Department's Mission

Environmental protection by requiring appropriate management of Alaska's landfills and safe pesticide use.

### Core Services

- Review and approve permit applications including plans for design, operations, monitoring, management, construction, and closure; issue permits for solid waste treatment and disposal facilities; and review monitoring results.
- Inspect landfills to verify their compliance with permit requirements and state solid waste regulations.
- Monitor closed landfill sites.
- Train and certify pesticide applicators.
- Register and monitor the sale, use, and storage of pesticides.
- Conduct inspections of pesticide distributors and applications of restricted use pesticides to ensure compliance with the Worker Protection Standards.
- Conduct inspections to ensure commercial pesticide application is done in accordance with the Endangered Species Act and Clean Water Act.
- Review water and sampling results for pesticides to ensure protection of ground water and surface water and report findings to the Environmental Protection Agency.
- Issue and monitor pesticide permits.

End Result	Strategies to Achieve End Result
<p><b>A: Landfills and pesticides are not sources of pollution.</b></p> <p><u>Target #1:</u> 100% of Class I and II municipal landfills, regulated industry landfills, and storage/transfer areas are properly located, authorized/permited, and operating landfills.</p> <p><u>Measure #1:</u> % of Class I and II municipal landfills, industrial landfills and storage/transfer areas that are properly located, authorized/permited and operating landfills.</p>	<p><b>A1: Establish protective standards for Solid Waste.</b></p> <p><u>Target #1:</u> Solid Waste regulations will be revised, adopted and implemented by the end of FY2008.</p> <p><u>Measure #1:</u> % of solid waste regulations and standards complete.</p> <p><u>Target #2:</u> Pesticide regulations are revised, adopted and implemented by the end of FY2007.</p> <p><u>Measure #2:</u> % of pesticide regulations and standards complete.</p> <p><b>A2: Issue Solid Waste permits timely.</b></p> <p><u>Target #1:</u> 90% of permits/authorizations are processed within 120 days of receiving required documentation.</p> <p><u>Measure #1:</u> % of permits/authorizations processed within 120 days of receiving required documentation.</p> <p><b>A3: Strengthen Solid Waste Program Enforcement.</b></p> <p><u>Target #1:</u> Implement enforcement program for Solid Waste by FY2008.</p> <p><u>Measure #1:</u> % of enforcement program implemented for Solid Waste.</p>

### Major Activities to Advance Strategies

- Implement the landfill location risk-based model.
- Evaluate, revise and start implementation of a risk-based statewide inspection and compliance plan.
- Implement a self-audit program for landfill owners based on different risk levels.
- Inspect landfills based on level of risk.
- Inspect for non-compliance of pesticide regulations and the Worker Protection Standard.
- Process pesticide application permits.
- Provide compliance assistance to and inspect public places, including schools, relating to pesticide use.
- Register pesticides for sale, distribution and use in the state.

### FY2009 Resources Allocated to Achieve Results

**FY2009 Component Budget: \$2,014,500**

**Personnel:**

Full time	21
Part time	0
<b>Total</b>	<b>21</b>

### Performance Measure Detail

#### A: Result - Landfills and pesticides are not sources of pollution.

**Target #1:** 100% of Class I and II municipal landfills, regulated industry landfills, and storage/transfer areas are properly located, authorized/permited, and operating landfills.

**Measure #1:** % of Class I and II municipal landfills, industrial landfills and storage/transfer areas that are properly located, authorized/permited and operating landfills.

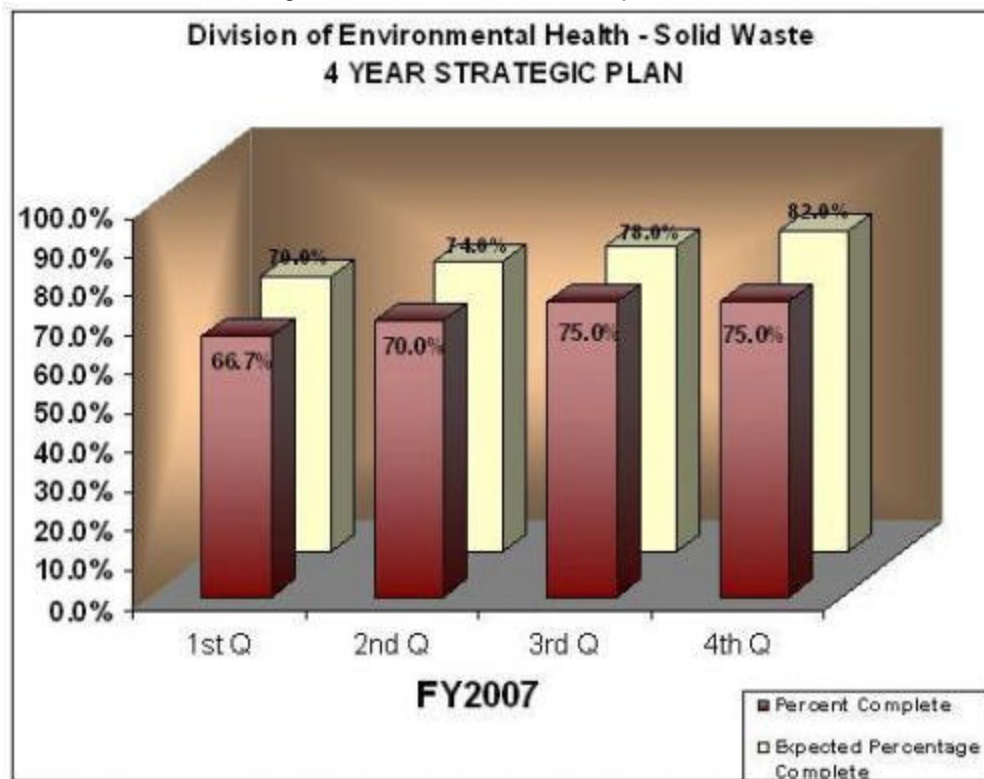


**Analysis of results and challenges:** All municipal landfills that receive more than 5 tons of waste per day and all disposal sites associated with industrial activities (oil & gas, construction, mining, and agriculture) are required to have a permit. The Solid Waste Program issues these permits and tracks the overall compliance rate by comparing the number of active permits to the number of sites that require a permit. Although the goal is that 100% of these facilities are permitted, two factors in how permits are tracked affect the Solid Waste Program's ability to reach that goal. One factor is that permits are renewed every five years and, when a renewal application is received, the permit status for the facility is changed in the Solid Waste Program database from "current" to "in process." Consequently, any facilities that are in the process of renewing their permits are not counted as having a permit. Another factor is that proposed facilities are entered into the database and the tracking system before the initial permit is issued and before the facility begins operations. Again, the proposed facilities are included in the count of facilities that need a permit, but are not counted among the facilities that have a permit. These factors had a direct effect on the compliance rate during this reporting period as two communities were in the process of closing an old landfill and opening a new landfill. In both cases, the database showed the permit for the old landfill as "expired" even though one of those landfills was operating under a permit that had been administratively continued and the other landfill was operating under a Compliance Order by Consent. Therefore, the overall compliance rate for this reporting period is artificially low.

### A1: Strategy - Establish protective standards for Solid Waste.

**Target #1:** Solid Waste regulations will be revised, adopted and implemented by the end of FY2008.

**Measure #1:** % of solid waste regulations and standards complete.

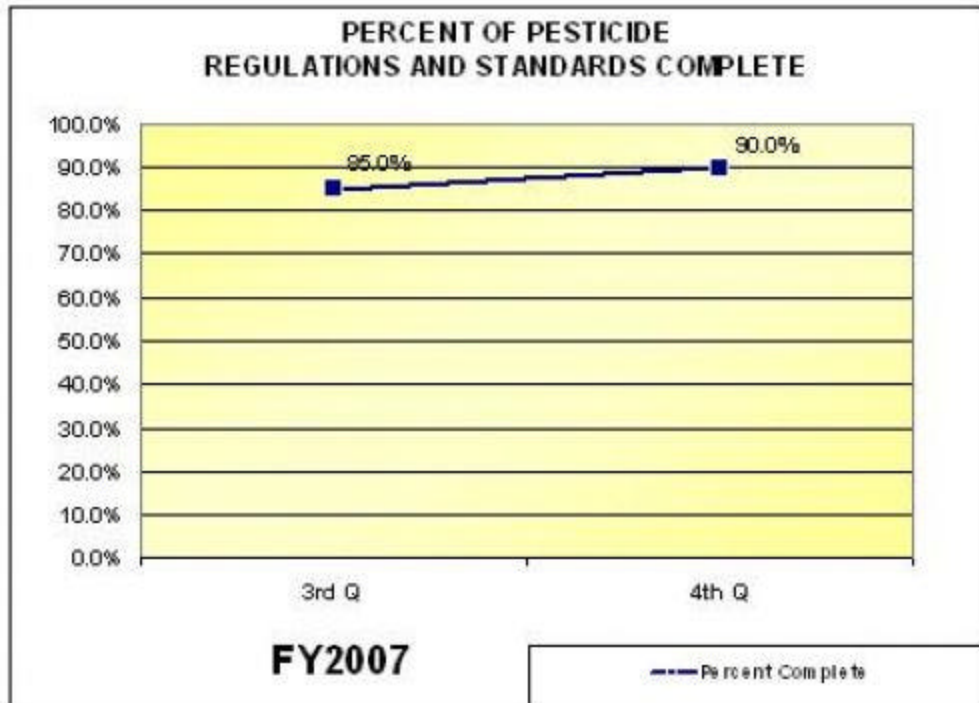


**Analysis of results and challenges:** Solid Waste Program effectively manages waste disposal in communities that produce more than 5 tons of municipal solid waste per day by issuing individual permits to the landfills serving those communities. Currently, small communities producing less than 5 tons of municipal solid waste per day are also required to have a permit, but only 25% of the Class III communities have permitted landfills. Since the permit process is difficult for small communities with limited resources, a simplified authorization process is needed to improve the permitting rate among small communities. As such, the department is in the process of changing the structure of the Solid Waste Program.

As a first step in this process, legislation was requested and passed in 2004 that gave DEC the ability to authorize disposal activities by regulation (i.e. prior authorization) rather than solely by permit. To utilize this new authority, it is necessary to revise the solid waste regulations. Efforts to revise the regulations have proceeded steadily and a draft package of revised regulations was completed by the end of FY2005. Much of FY2006 was spent on internal review of the draft regulations and revision of the regulations in response to review comments from the Commissioner's Office. During FY2007, the Solid Waste Program completed a comprehensive rewrite of the draft package to improve the readability and organization of the regulations. The package was submitted to the Commissioner's Office for review, pending approval from the Commissioner's Office, the draft regulations will be released for public comment.

**Target #2:** Pesticide regulations are revised, adopted and implemented by the end of FY2007.

**Measure #2:** % of pesticide regulations and standards complete.

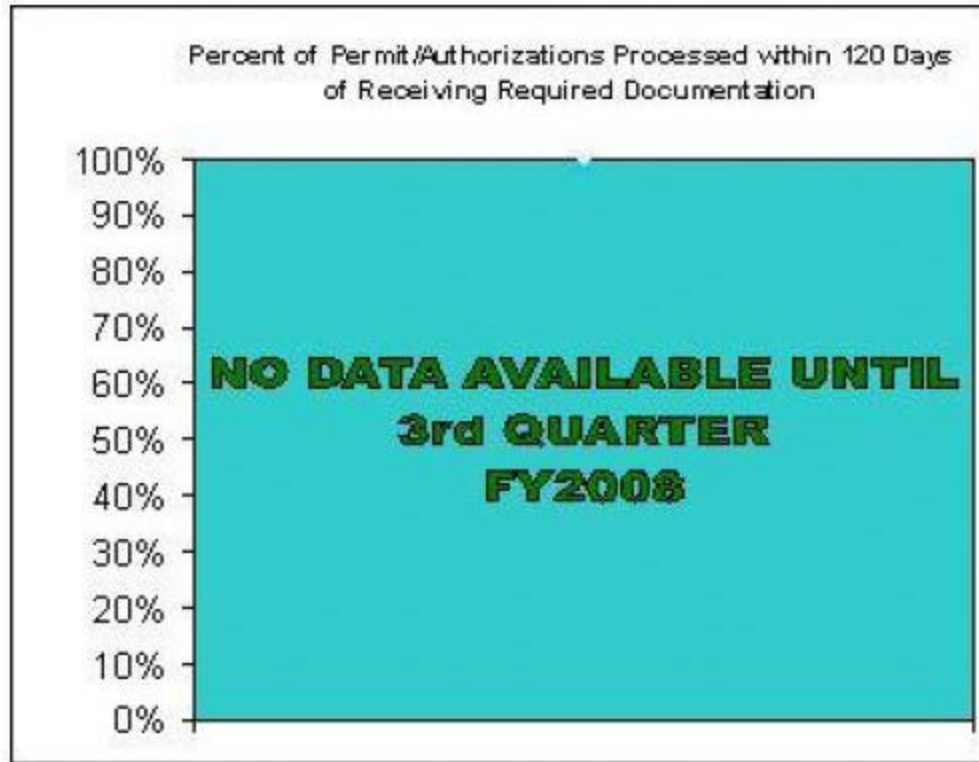


**Analysis of results and challenges:** During the 2004-2005 legislative sessions, the Alaska State Legislature enacted a new law that required the Department of Environmental Conservation to develop regulations to ensure that reasonable, on-site notice is provided prior to the application of pesticides in a public place. Implementing this law requires amending the existing pesticide regulations. During this reporting period, changes were made to the original draft of the regulations in response to public and agency comments and the revised document was submitted to the Lieutenant Governor's Office for approval.

**A2: Strategy - Issue Solid Waste permits timely.**

**Target #1:** 90% of permits/authorizations are processed within 120 days of receiving required documentation.

**Measure #1:** % of permits/authorizations processed within 120 days of receiving required documentation.



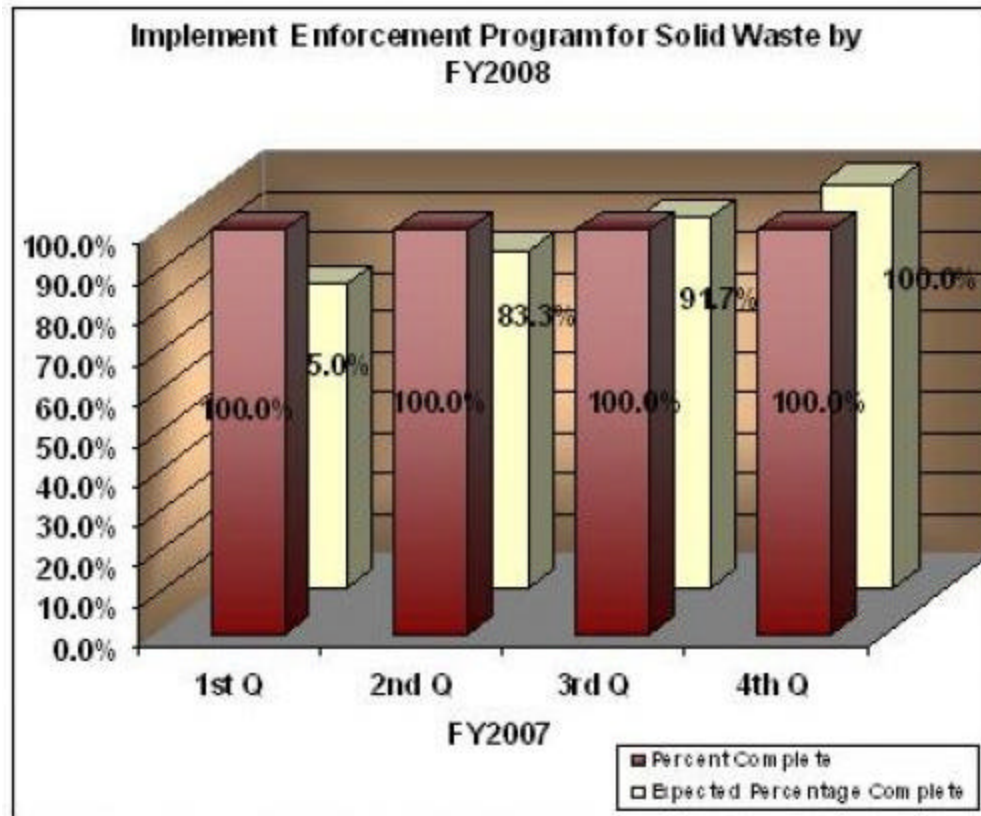
**Analysis of results and challenges:** Tracking the time it takes to process a Class I, Class II, and industrial permit is a new measure for the Solid Waste Program. The current database is not set up to track this measure, so the program must implement a new database that will allow for tracking the permitting process, including documenting the receipt of incomplete permit applications, the date a complete application is received, and the date of final approval or denial of the requested permit.

Although the new database is under development, progress is temporarily stalled. In FY2006, the design requirements for the database were compiled by a contractor hired for that purpose and a prototype of the new database was developed. However, the contract was cancelled when the cost estimate for completing construction of the database exceeded the available funding. As a result, the database did not become functional during FY2007 as was expected. At present, ADEC staff members are working to complete the database using the existing prototype and the goal is to have the database completed and operational by the time the new Solid Waste regulations are implemented. Reporting of this measure will not be possible until the new database is functional, which is conservatively projected to be the end of FY2008.

**A3: Strategy - Strengthen Solid Waste Program Enforcement.**

**Target #1:** Implement enforcement program for Solid Waste by FY2008.

**Measure #1:** % of enforcement program implemented for Solid Waste.



**Analysis of results and challenges:** The Solid Waste Program undertook major restructuring of the permitting process and development of "prior authorization" procedure for municipal and industrial landfills. With these revisions and new structures, the Solid Waste Program evaluates non-compliance with landfill permitting and prior authorization to determine the appropriate level and type of enforcement for violations. A policy has been established for how formal enforcement will proceed when such action is necessary. With the policy in place, the measure is reported as 100% complete and will be removed at the end of FY2007.

## Air Quality Results Delivery Unit

### Contribution to Department's Mission

Protect air quality.

### Core Services

- Issue air quality permits to facilities that release potentially harmful pollutants.
- Provide compliance assistance and enforcement (inspections and operating report reviews).
- Community assistance to protect air quality.
- Air quality assessments.

End Result	Strategies to Achieve End Result
<p><b>A: Air quality is protected.</b></p> <p><u>Target #1:</u> No days violating air quality health based standards.</p> <p><u>Measure #1:</u> # of days violating the air quality health based standards (from human sources of pollution).</p> <p><u>Target #2:</u> No days violating air quality health based standards.</p> <p><u>Measure #2:</u> # of days violating the air quality health based standards (from natural sources of pollution).</p>	<p><b>A1: Establish standards for air quality that are protective of public health and the environment.</b></p> <p><u>Target #1:</u> Complete preliminary assessment of health impacts of diesel fuel emissions in rural communities by the end of FY2007.</p> <p><u>Measure #1:</u> % of preliminary assessment of health impacts of diesel fuel emissions in rural communities completed by the end of FY2007.</p> <p><u>Target #2:</u> Complete regional haze SIP by the end of FY2008.</p> <p><u>Measure #2:</u> % of SIP for regional haze complete by the end FY2008.</p> <p><b>A2: Improve and streamline air permit practices.</b></p> <p><u>Target #1:</u> All categories of permits will have standardized applications and internal review procedures by the end of FY2008.</p> <p><u>Measure #1:</u> % of permits categories that have standardized application and internal review procedures.</p> <p><u>Target #2:</u> 95% of construction and minor permits issued within 130 days of receiving a completed application.</p> <p><u>Measure #2:</u> % of construction and minor permits issued within 130 days of receiving a completed application.</p> <p><b>A3: Minimize pollution from gasoline vehicles.</b></p> <p><u>Target #1:</u> For communities that have Inspection and Maintenance (I/M) programs, no more than 5% of vehicles are found to be out of compliance with tailpipe requirements.</p> <p><u>Measure #1:</u> % of vehicles found to be out of compliance.</p> <p><b>A4: Minimize pollution from stationary sources.</b></p>

**Target #1:** 100% of facilities requiring air permits are in compliance.  
**Measure #1:** % of facilities found in compliance, or on an enforceable compliance schedule, or subject to formal enforcement action by the department.

### Major Activities to Advance Strategies

- Establish and operate air monitors.
- Develop strategies to address particulate matter pollution problems.
- Implement a Quality Management System for permit and compliance services.
- Conduct compliance inspections and in-office compliance reviews.
- Assist the Commissioner and the executive sub-cabinet in developing a climate change strategy.
- Improve on-line permitting services and compliance reporting for external users.

### FY2009 Resources Allocated to Achieve Results

**FY2009 Results Delivery Unit Budget: \$9,302,600**

**Personnel:**

Full time	62
Part time	0
<b>Total</b>	<b>62</b>

### Performance Measure Detail

#### A: Result - Air quality is protected.

**Target #1:** No days violating air quality health based standards.

**Measure #1:** # of days violating the air quality health based standards (from human sources of pollution).



**Analysis of results and challenges:** DEC has been collecting ambient air data at selected locations around the state for over 25 years. Air monitoring is performed to ensure compliance with the National Ambient Air

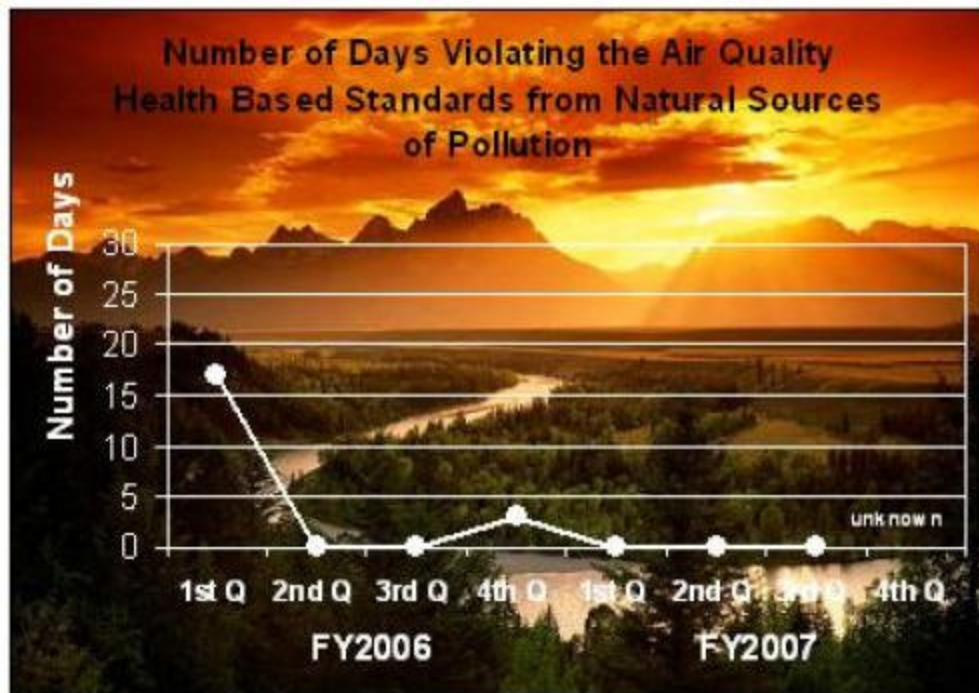
Quality Standards designed to protect public health. The majority of the State's monitoring takes place in larger communities or where complaints have been received. The graph shown above demonstrates that there were no violations of the carbon monoxide (CO) standard during FY2006 and the first three quarters of FY2007 from human caused activity within the State's customary monitoring network. Violations of the coarse particulate matter standard (PM-10) and the new fine particulate matter standard (PM2.5) were recorded during the first quarter of FY2006 (PM-10) and the second and third quarter of FY2006 and FY2007 (PM2.5). Fourth quarter data for FY2007 is not yet available.

With the recent review of the National Ambient Air Quality Standards, the PM2.5 standard was made more stringent in light of recent medical research: the new allowed safe exposure level is 55% of the previous standard. Using data from 2004 – 2006, Fairbanks will be designated a non attainment area for fine particulate matter. Other communities like Juneau and communities in the Matanuska-Susitna Valley potentially face violating the new tighter standard.

In addition to the State monitoring network, the Air Quality division is engaged in an air monitoring project to measure airborne levels of dust (PM-10) pollution as part of a Department of Transportation (DOT) research project evaluating the effectiveness of paving roads in Kotzebue. High airborne dust levels from vehicle traffic on unpaved roads violate the health based standard in Kotzebue and other rural communities. Although monitoring data exists only in few communities, conditions around the state suggest that the violations of the PM-10 standard are a common occurrence in the summer in rural Alaskan villages. The Department will be working with the affected communities and DOT to develop an effective control strategy for dust in the Region.

**Target #2:** No days violating air quality health based standards.

**Measure #2:** # of days violating the air quality health based standards (from natural sources of pollution).



**Analysis of results and challenges:** Alaska has many sources of natural pollution; wind blown dust, dust from volcanic eruptions and smoke from forest fires. Although natural in source, these forms of pollution can severely impact public health and impact the public's enjoyment of Alaska.

The US EPA has provisions in the Clean Air Act which do not hold a state liable for violations of the air quality standard when it is caused by natural sources. The state is however required to issue air advisories, warning the public of potential dangers and recommending protective action.

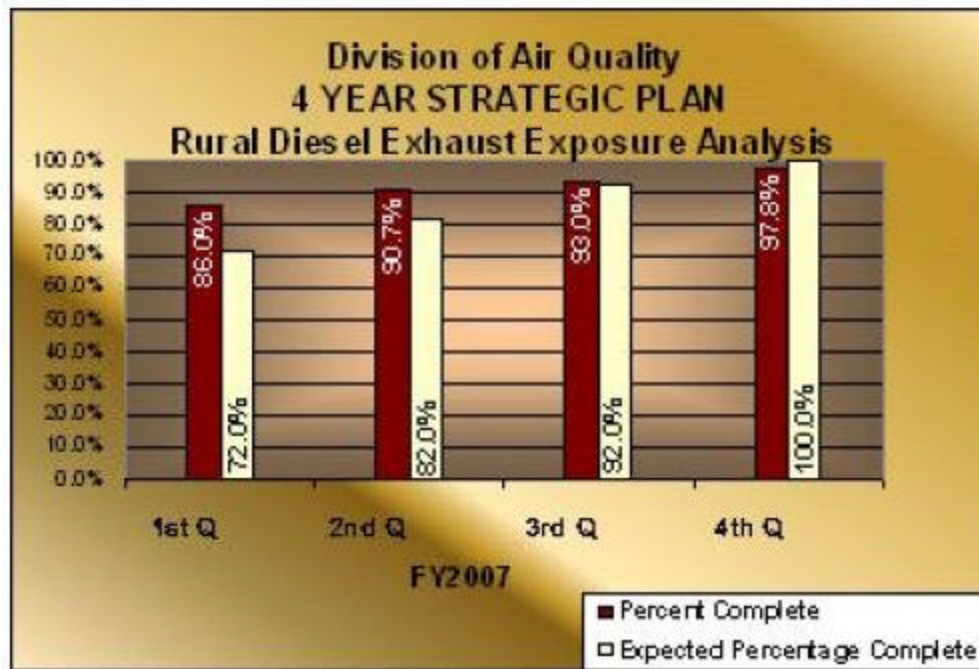
Every summer wild land fires impact public health. After applying the new more stringent ambient air quality

standards to prior year data (FY06), it was found that during the first and fourth quarter, numerous violations of the fine particle standards (PM<sub>2.5</sub>) were recorded due to natural sources. There were no violations for the first three quarters of FY2007. Fourth quarter data is not yet available.

### **A1: Strategy - Establish standards for air quality that are protective of public health and the environment.**

**Target #1:** Complete preliminary assessment of health impacts of diesel fuel emissions in rural communities by the end of FY2007.

**Measure #1:** % of preliminary assessment of health impacts of diesel fuel emissions in rural communities completed by the end of FY2007.



**Analysis of results and challenges:** The diesel health assessment project is designed to quantify health risks due to diesel exhaust pollutants. New federal rules will reduce diesel exhaust pollution from mobile equipment, like trucks and buses. Diesel fuel use in rural Alaska is dominated by power generation and home heating equipment – not mobile sources. Federal rules do not address these rural Alaska sources of diesel exhaust and did not consider the unique source and population exposure profile of rural Alaska. Federal rules proposed in 2006 will require lower emission from newly purchased diesel electric generating units. Credible scientific information is needed to determine whether diesel related health impacts are occurring in rural areas and whether the costs associated with converting communities to cleaner diesel fuel are justified.

This is a multi-year project. During FY2005, department staff worked with the University of Alaska, Institute of Circumpolar Health and the Alaska Native Health Board to find a willing community in which to conduct a pilot study on the impacts of diesel in rural areas. Staff acquired resolutions supporting the study from each candidate community. Ambient monitoring equipment was procured and a contract was established with the University of Alaska for the health assessment work.

During FY2006, agreements were made between Department of Environmental Conservation (DEC) and local community governments for placement and operation of air monitors for the pilot study. DEC identified monitoring sites, installed monitors, trained locals to run the monitors, and oversaw monitoring during the late winter and early spring. The University of Alaska, Institute of Circumpolar Health obtained approvals to perform pulmonary health measurements, recruited and trained health assessors, recruited subjects, installed indoor air monitors, and performed health assessments.

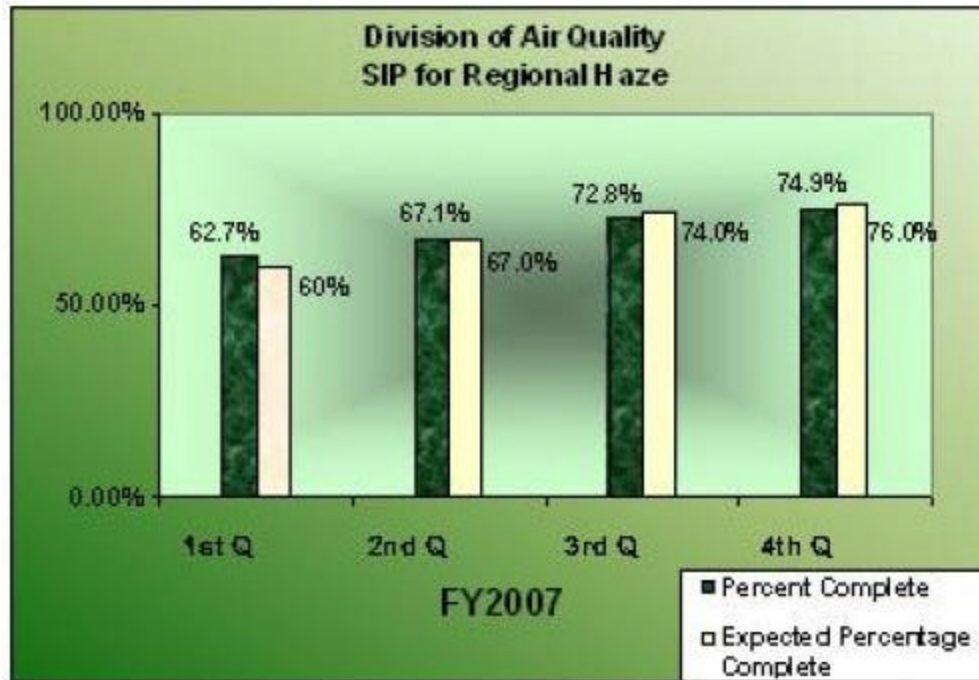
During FY2007 DEC staff and the University of Alaska researchers began analyzing and evaluating the air

monitoring and health data collected during the field portion of the study. During the second half of FY2007 DEC and University of Alaska researchers completed their data analyses, prepared a draft study report, and presented the results to the community.

During the first quarter of FY2008, DEC will provide the draft report to the EPA staff for review and comment. A final report will then be prepared and the pilot project will be complete.

**Target #2:** Complete regional haze SIP by the end of FY2008.

**Measure #2:** % of SIP for regional haze complete by the end FY2008.



**Analysis of results and challenges:** A Regional Haze State Implementation Plan (SIP) is required by the Clean Air Act to address visibility concerns in Denali National Park and three wildlife refuges in Alaska. The plan is due to EPA by December 17, 2007.

This is a multi-year project. During fiscal years 2004, 2005, and 2006, the department focused on the development of the technical information needed for the plan with help from external organizations. Federal agencies operate the primary visibility monitoring network. Alaska is a member of the Western Regional Air Partnership (WRAP), a regional planning organization that consists of states, tribes, and federal agencies. WRAP assists Alaska with developing technical information and policy tools needed for the SIP including: developing an inventory of emissions, visibility forecast models for future years and analysis of air monitoring samples. In addition to developing technical data, the department worked with land managing agencies to develop a Smoke Management Plan that will become a part of the regional haze SIP. The new Smoke Management Plan should allow for a balanced approach to managing controlled burns for resource development while also protecting visibility in Denali Park and other Alaska Class I visibility protection areas.

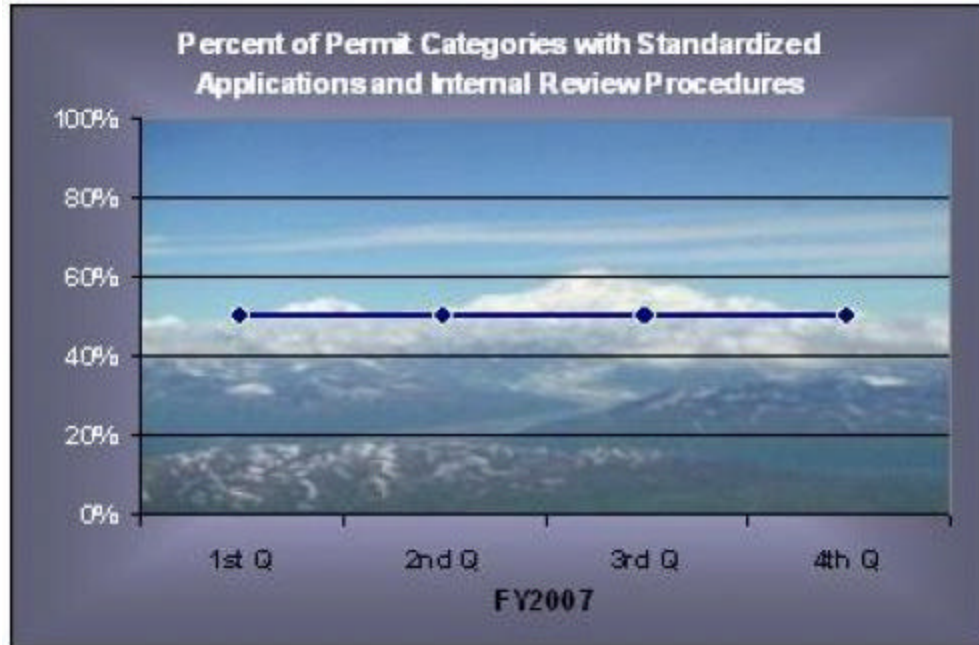
During FY2007 the department continued to work on finalizing the technical information for the SIP and the Smoke Management Plan. The department has been developing technical tools to assist in the implementation of the Smoke Management Plan. The department began work on addressing the EPA requirements for Best Available Retrofit Technology (BART) controls on specific, older industrial sources. EPA regulations require that BART must be addressed in the regional haze SIP. A BART regulation package was prepared and shared at public workshops. The regulations will be finalized during the next fiscal year, formally initiating the BART determination process needed for the SIP. The current timeline to complete BART analyses and determinations will delay the completion - missing the federal deadline by 12 to 18 months.

During FY2008, the department will complete work on the technical basis for the SIP and, if controls are warranted, evaluate control options. To do this, the Department will collect, analyze, and evaluate visibility impacts from air pollution in these areas, and identify controls to reduce those visibility impacts. The project is broken into major steps such as the collection of technical information, analysis of control strategies, drafting of the SIP document, regulation development and the public adoption process. The Department is measuring progress toward completing the regional haze SIP by tracking major project steps.

## **A2: Strategy - Improve and streamline air permit practices.**

**Target #1:** All categories of permits will have standardized applications and internal review procedures by the end of FY2008.

**Measure #1:** % of permits categories that have standardized application and internal review procedures.

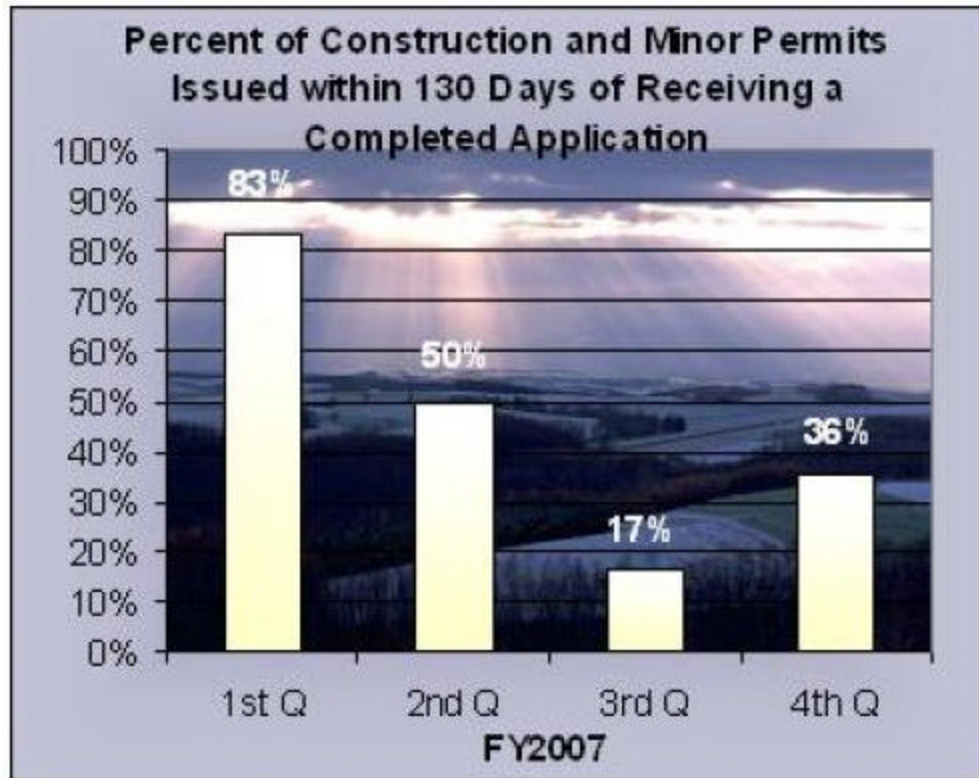


**Analysis of results and challenges:** Standardized applications and internal review procedures allow the Department to act consistently and efficiently on permit applications. Our permitting program has four major categories of permits: Construction permits, general permits, facility specific operating permits, and minor source permits. General permits are either general operating permits or general minor permits.

Standard review procedures for all permit categories continue to be updated. The current four major categories do not accurately reflect the intricacy of the permits or review process. A standardized review process requires a determination of specific requirements for the array of permit applications. In FY2007, the Air Permits Program began a Quality Management System (QMS) based on ISO 9000 standards. QMS and technical staff are identifying the complex requirements for permits and the review process. Permit flow charts are complete and standardized work instructions are in development. We expect complete development of standardized applications and internal review procedures by the end of FY2008.

**Target #2:** 95% of construction and minor permits issued within 130 days of receiving a completed application.

**Measure #2:** % of construction and minor permits issued within 130 days of receiving a completed application.



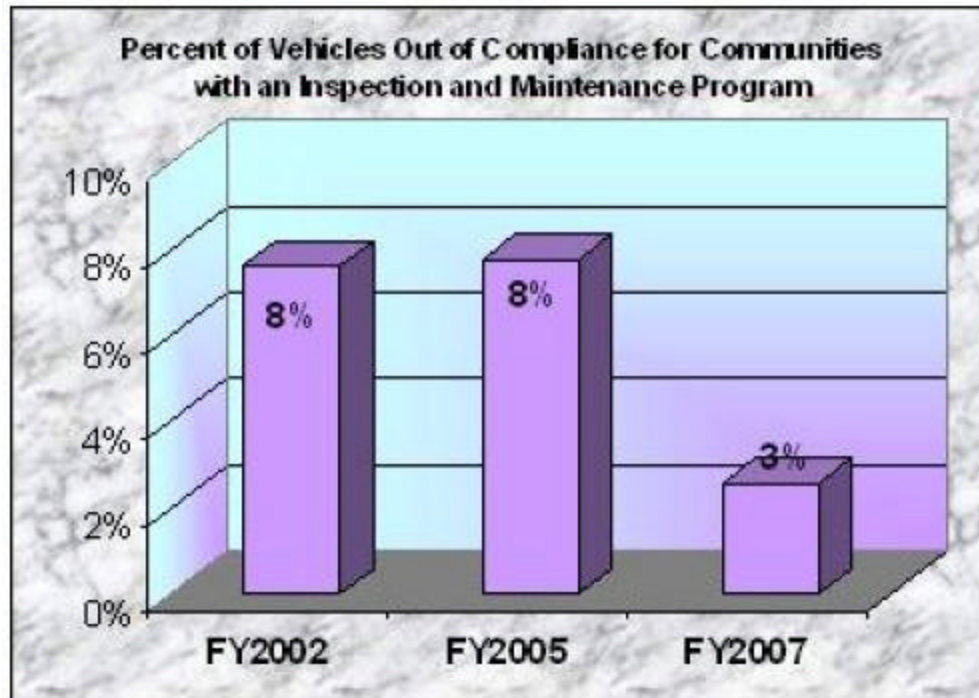
**Analysis of results and challenges:** Results for this measure are calculated by dividing the number of permits issued within the quarter in 130 days or less by the total number of permits issued during the quarter. The clock starts when a complete application is received and any applicable fees have been paid. If additional information is needed, the clock stops until the information is provided.

The percentage of permits issued within 130 days was down during the second, third and fourth quarters of FY2007 because of staff turnover and recruitment difficulties. One position was hired during the second quarter, but it takes nine months to a year for new staff to be fully proficient. In addition, three of the eight positions are vacant as of the end of the fourth quarter. The program expects to hire one of the vacant positions in the first quarter of FY2008, and will recruit for two vacant positions in the second quarter of FY2008.

### A3: Strategy - Minimize pollution from gasoline vehicles.

**Target #1:** For communities that have Inspection and Maintenance (I/M) programs, no more than 5% of vehicles are found to be out of compliance with tailpipe requirements.

**Measure #1:** % of vehicles found to be out of compliance.



**Analysis of results and challenges:** Anchorage and Fairbanks exceeded health based standards for carbon monoxide in 1972. This required the start of a vehicle inspection program in 1985. Vehicles registered in both communities must pass an emission inspection to be registered or have their registration renewed by DMV. In addition, vehicle owners who live outside of Anchorage or Fairbanks but commute to work and school inside these locales are required to have an inspection.

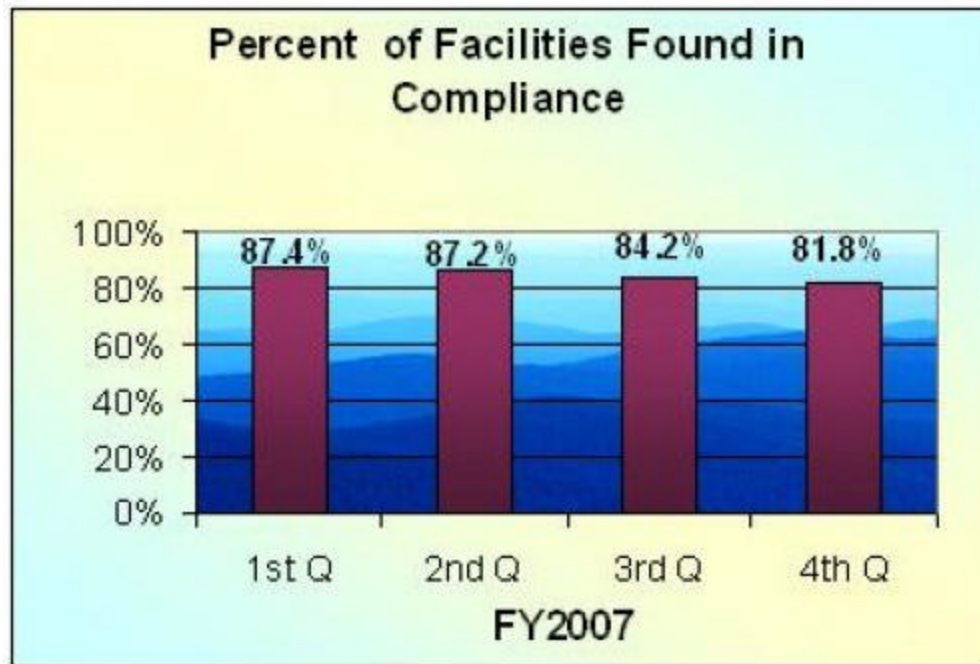
To determine compliance with the vehicle inspection program, the department performs a survey of in-use vehicles every other year in Anchorage and Fairbanks, recording the license plate and windshield sticker information. In order to be statistically valid, approximately 10,000 non-duplicative vehicle license plate recordings are needed in Anchorage and approximately 6,000 in Fairbanks. In-use vehicle records from the survey are electronically compared to the I/M inspection database, which can identify whether the vehicle has a current inspection.

The time and location for each survey is selected very carefully. Surveys are not conducted during evenings or weekends. Emphasis is placed on areas used by the local resident, businesses, and school parking lots. Information is collected in winter when carbon monoxide problems exist. Those vehicles that do not need an inspection are excluded. The time necessary to collect the number of vehicle observations is very labor intensive. Due to these limitations of time and expense, data is collected once every two years. FY2007 data currently displayed was for surveys conducted in January to March, 2007. Data collection is next scheduled for January to March of FY2009.

**A4: Strategy - Minimize pollution from stationary sources.**

**Target #1:** 100% of facilities requiring air permits are in compliance.

**Measure #1:** % of facilities found in compliance, or on an enforceable compliance schedule, or subject to formal enforcement action by the department.



**Analysis of results and challenges:** These figures represent the number of permitted stationary sources that have unaddressed compliance issues and the total number of permitted sources. Air program inspectors record data regarding source compliance issues found through public complaints, permittee self-reporting, and during the inspectors' scheduled compliance evaluations. The program evaluates compliance status of each major permitted source no less than once every two years and the compliance status of each synthetic minor permitted source no less than once every five years.

In FY2005, the percentage of permitted sources found in compliance was 92 percent. Compliance rates dropped to the mid 80 percent range in FY2007 and we attribute this downward trend to recordkeeping and data tracking improvements.

## Component: Air Quality

### Contribution to Department's Mission

Identify, prevent, abate, and control air pollution to protect public health and the environment in a cost-effective, accountable manner.

### Core Services

- Issue air quality permits to facilities that release potentially harmful pollutants.
- Provide compliance assistance and enforcement (inspections and operating report reviews).
- Community assistance to protect air quality.
- Air quality assessments.

End Result	Strategies to Achieve End Result
<p><b>A: Air quality is protected.</b></p> <p><u>Target #1:</u> No days violating air quality health based standards.</p> <p><u>Measure #1:</u> # of days violating the air quality health based standards (from human sources of pollution).</p> <p><u>Target #2:</u> No days violating air quality health based standards.</p> <p><u>Measure #2:</u> # of days violating the air quality health based standards (from natural sources of pollution).</p>	<p><b>A1: Establish standards for air quality that are protective of public health and the environment.</b></p> <p><u>Target #1:</u> Complete preliminary assessment of health impacts of diesel fuel emissions in rural communities by the end of FY2007.</p> <p><u>Measure #1:</u> % of preliminary assessment of health impacts of diesel fuel emissions in rural communities completed by the end of FY2007.</p> <p><u>Target #2:</u> Complete regional haze SIP by the end of FY2008.</p> <p><u>Measure #2:</u> % of SIP for regional haze complete by the end of FY2008.</p> <p><b>A2: Improve and streamline air permit practices.</b></p> <p><u>Target #1:</u> All categories of permits will have standardized applications and internal review procedures by the end of FY2008.</p> <p><u>Measure #1:</u> % of permits categories that have standardized application and internal review procedures.</p> <p><u>Target #2:</u> 95% of construction and minor permits issued within 130 days of receiving a completed application.</p> <p><u>Measure #2:</u> % of construction and minor permits issued within 130 days of receiving a completed application.</p> <p><b>A3: Minimize pollution from gasoline vehicles.</b></p> <p><u>Target #1:</u> For communities that have Inspection and Maintenance (I/M) programs, no more than 5% of vehicles are found to be out of compliance with tailpipe requirements.</p> <p><u>Measure #1:</u> % of vehicles found to be out of compliance.</p>

**A4: Minimize pollution from stationary sources.**

Target #1: 100% of facilities requiring air permits are in compliance.

Measure #1: % of facilities found in compliance, or on an enforceable compliance schedule, or subject to formal enforcement action by the department.

### Major Activities to Advance Strategies

- Establish and operate air monitors.
- Develop strategies to address particulate matter pollution problems.
- Implement Quality Management System for permit and compliance services.
- Conduct compliance inspections and in-office compliance reviews.
- Assist the Commissioner and the executive sub-cabinet in developing a climate change strategy.
- Improve on-line permitting services and compliance reporting for external users.

### FY2009 Resources Allocated to Achieve Results

**FY2009 Component Budget: \$9,059,600**

**Personnel:**

Full time	60
Part time	0
<b>Total</b>	<b>60</b>

### Performance Measure Detail

#### A: Result - Air quality is protected.

**Target #1:** No days violating air quality health based standards.

**Measure #1:** # of days violating the air quality health based standards (from human sources of pollution).



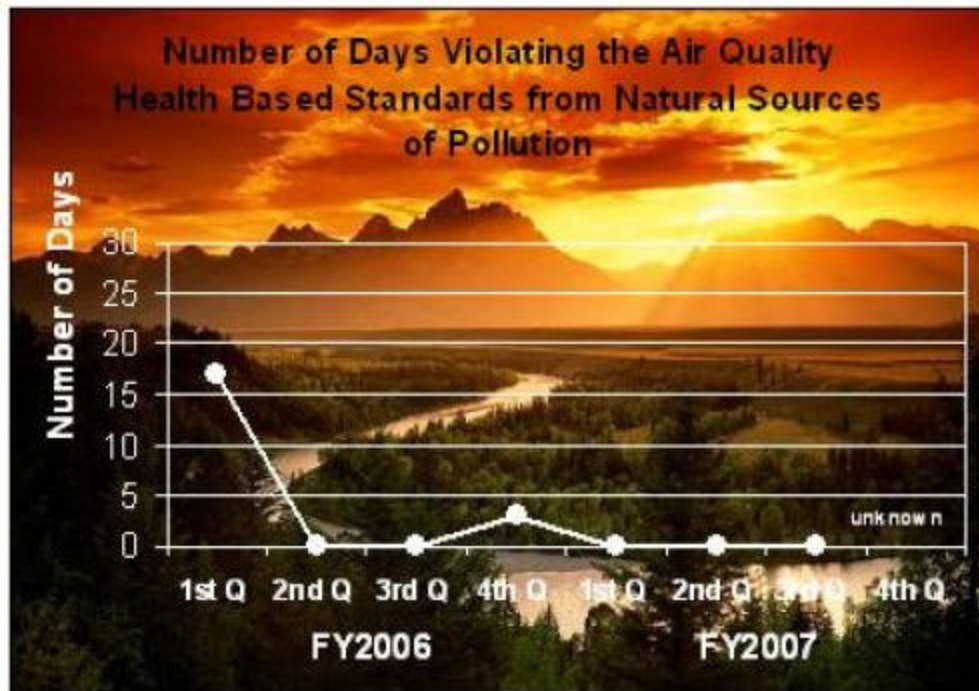
**Analysis of results and challenges:** DEC has been collecting ambient air data at selected locations around the state for over 25 years. Air monitoring is performed to ensure compliance with the National Ambient Air Quality Standards designed to protect public health. The majority of the State's monitoring takes place in larger communities or where complaints have been received. The graph shown above demonstrates that there were no violations of the carbon monoxide (CO) standard during FY2006 and the first three quarters of FY2007 from human caused activity within the State's customary monitoring network. Violations of the coarse particulate matter standard (PM-10) and the new fine particulate matter standard (PM2.5) were recorded during the first quarter of FY2006 (PM-10) and the second and third quarter of FY2006 and FY2007 (PM2.5). Fourth quarter data for FY2007 is not yet available.

With the recent review of the National Ambient Air Quality Standards, the PM2.5 standard was made more stringent in light of recent medical research: the new allowed safe exposure level is 55% of the previous standard. Using data from 2004 – 2006, Fairbanks will be designated a non attainment area for fine particulate matter. Other communities like Juneau and communities in the Matanuska-Susitna Valley potentially face violating the new tighter standard.

In addition to the State monitoring network, the Air Quality division is engaged in an air monitoring project to measure airborne levels of dust (PM-10) pollution as part of a Department of Transportation (DOT) research project evaluating the effectiveness of paving roads in Kotzebue. High airborne dust levels from vehicle traffic on unpaved roads violate the health based standard in Kotzebue and other rural communities. Although monitoring data exists only in few communities, conditions around the state suggest that the violations of the PM-10 standard are a common occurrence in the summer in rural Alaskan villages. The Department will be working with the affected communities and DOT to develop an effective control strategy for dust in the Region.

**Target #2:** No days violating air quality health based standards.

**Measure #2:** # of days violating the air quality health based standards (from natural sources of pollution).



**Analysis of results and challenges:** Alaska has many sources of natural pollution; wind blown dust, dust from volcanic eruptions and smoke from forest fires. Although natural in source, these forms of pollution can severely impact public health and impact the public's enjoyment of Alaska.

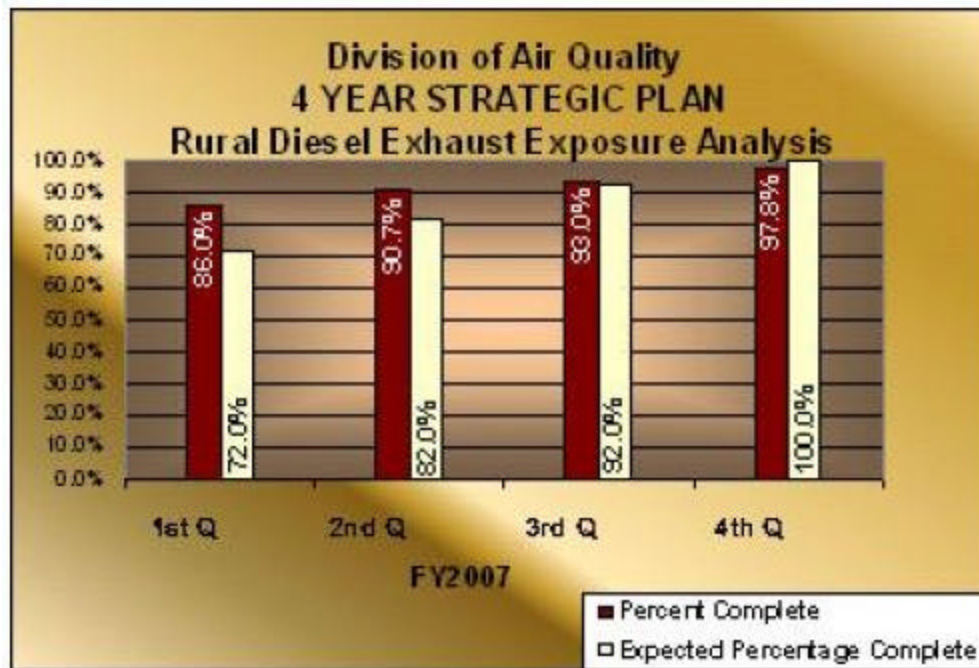
The US EPA has provisions in the Clean Air Act which do not hold a state liable for violations of the air quality standard when it is caused by natural sources. The state is however required to issue air advisories, warning the public of potential dangers and recommending protective action.

Every summer wild land fires impact public health. After applying the new more stringent ambient air quality standards to prior year data (FY06), it was found that during the first and fourth quarter, numerous violations of the fine particle standards (PM<sub>2.5</sub>) were recorded due to natural sources. There were no violations for the first three quarters of FY2007. Fourth quarter data is not yet available.

### A1: Strategy - Establish standards for air quality that are protective of public health and the environment.

**Target #1:** Complete preliminary assessment of health impacts of diesel fuel emissions in rural communities by the end of FY2007.

**Measure #1:** % of preliminary assessment of health impacts of diesel fuel emissions in rural communities completed by the end of FY2007.



**Analysis of results and challenges:** The diesel health assessment project is designed to quantify health risks due to diesel exhaust pollutants. New federal rules will reduce diesel exhaust pollution from mobile equipment, like trucks and buses. Diesel fuel use in rural Alaska is dominated by power generation and home heating equipment – not mobile sources. Federal rules do not address these rural Alaska sources of diesel exhaust and did not consider the unique source and population exposure profile of rural Alaska. Federal rules proposed in 2006 will require lower emission from newly purchased diesel electric generating units. Credible scientific information is needed to determine whether diesel related health impacts are occurring in rural areas and whether the costs associated with converting communities to cleaner diesel fuel are justified.

This is a multi-year project. During FY2005, department staff worked with the University of Alaska, Institute of Circumpolar Health and the Alaska Native Health Board to find a willing community in which to conduct a pilot study on the impacts of diesel in rural areas. Staff acquired resolutions supporting the study from each candidate community. Ambient monitoring equipment was procured and a contract was established with the University of Alaska for the health assessment work.

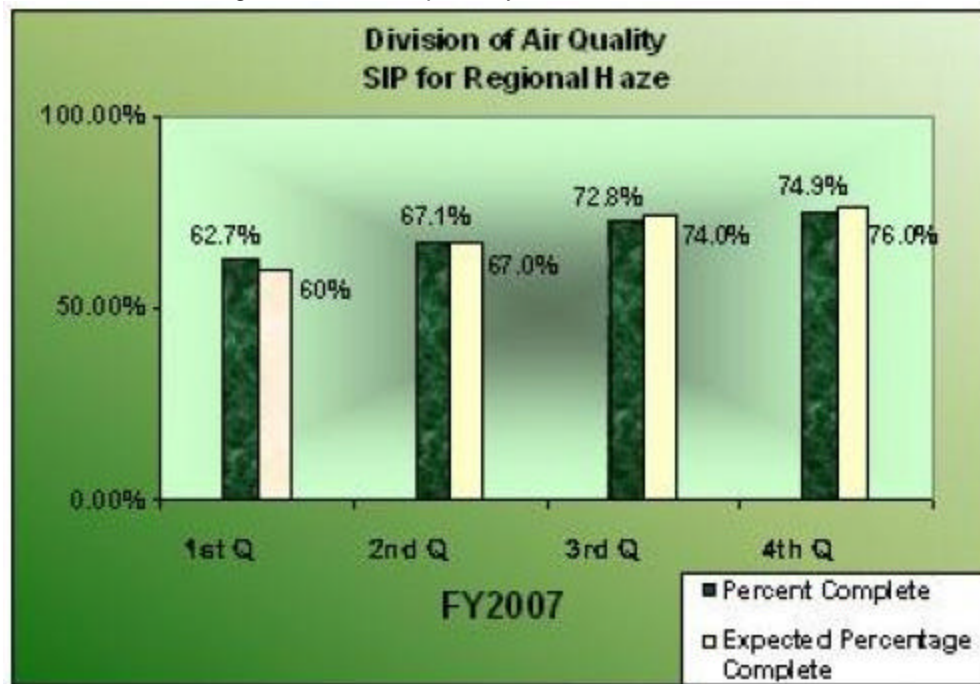
During FY2006, agreements were made between Department of Environmental Conservation (DEC) and local community governments for placement and operation of air monitors for the pilot study. DEC identified monitoring sites, installed monitors, trained locals to run the monitors, and oversaw monitoring during the late winter and early spring. The University of Alaska, Institute of Circumpolar Health obtained approvals to perform pulmonary health measurements, recruited and trained health assessors, recruited subjects, installed indoor air monitors, and performed health assessments.

During FY2007, DEC staff and the University of Alaska researchers began analyzing and evaluating the air monitoring and health data collected during the field portion of the study. During the second half of FY2007, DEC and University of Alaska researchers completed their analyses, prepared a draft study report, and presented the results to the community.

During the first quarter of FY2008, DEC will provide the draft report to EPA staff for review and comment. A final report will then be prepared and the pilot project will be complete.

**Target #2:** Complete regional haze SIP by the end of FY2008.

**Measure #2:** % of SIP for regional haze complete by the end of FY2008.



**Analysis of results and challenges:** A Regional Haze State Implementation Plan (SIP) is required by the Clean Air Act to address visibility concerns in Denali National Park and three wildlife refuges in Alaska. The plan is due to EPA by December 17, 2007.

This is a multi-year project. During fiscal years 2004, 2005, and 2006, the department focused on the development of the technical information needed for the plan with help from external organizations. Federal agencies operate the primary visibility monitoring network. Alaska is a member of the Western Regional Air Partnership (WRAP), a regional planning organization that consists of states, tribes, and federal agencies. WRAP assists Alaska with developing technical information and policy tools needed for the SIP including: developing an inventory of emissions, visibility forecast models for future years and analysis of air monitoring samples. In addition to developing technical data, the department worked with land managing agencies to develop a Smoke Management Plan that will become a part of the regional haze SIP. The new Smoke Management Plan should allow for a balanced approach to managing controlled burns for resource development while also protecting visibility in Denali Park and other Alaska Class I visibility protection areas.

During FY2007 the department continued to work on finalizing the technical information for the SIP and the Smoke Management Plan. The department has been developing technical tools to assist in the implementation of the Smoke Management Plan. The department began work on addressing the EPA requirements for Best Available Retrofit Technology (BART) controls on specific, older industrial sources. EPA regulations require that BART must be addressed in the regional haze SIP. A BART regulation package was prepared and shared at public workshops. These regulations will be finalized during the next fiscal year, formally initiating the BART determination process needed for the SIP. The current timeline to complete BART analyses and determinations will delay the completion - missing the federal deadline by 12 to 18

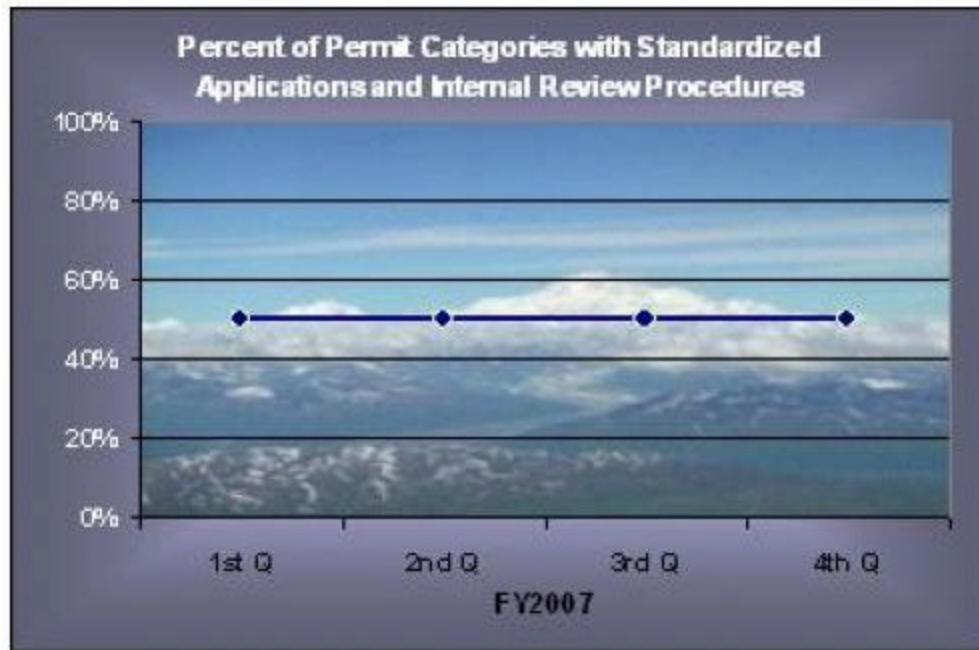
months.

During FY2008, the department will complete work on the technical basis for the SIP and, if controls are warranted, evaluate control options. To do this, the department will collect, analyze, and evaluate visibility impacts from air pollution in these areas, and identify controls to reduce those visibility impacts. The project is broken into major steps such as the collection of technical information, analysis of control strategies, drafting of the SIP document, regulation development and the public adoption process. The department is measuring progress toward completing the regional haze SIP by tracking major project steps.

## **A2: Strategy - Improve and streamline air permit practices.**

**Target #1:** All categories of permits will have standardized applications and internal review procedures by the end of FY2008.

**Measure #1:** % of permits categories that have standardized application and internal review procedures.

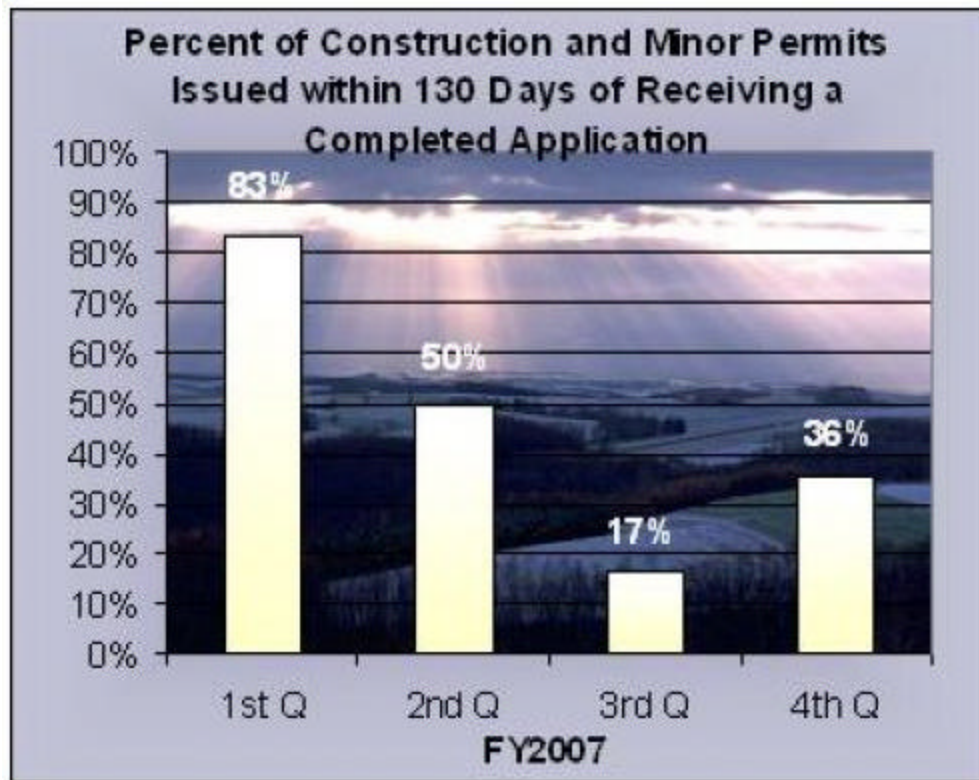


**Analysis of results and challenges:** Standardized applications and internal review procedures allow the Department to act consistently and efficiently on permit applications. Our permitting program has four major categories of permits: Construction permits, general permits, facility specific operating permits, and minor source permits. General permits are either general operating permits or general minor permits.

Standard review procedures for all permit categories continue to be updated. The current four major categories do not accurately reflect the intricacy of the permits or review process. A standardized review process requires a determination of specific requirements for the array of permit applications. In FY2007 the Air Permits Program began a Quality Management System (QMS) based on ISO 9000 standards. QMS and technical staff are identifying the complex requirements for permits and the review process. Permit flow charts are complete and standardized work instructions are in development. We expect complete development of standardized applications and internal review procedures by the end of FY2008.

**Target #2:** 95% of construction and minor permits issued within 130 days of receiving a completed application.

**Measure #2:** % of construction and minor permits issued within 130 days of receiving a completed application.



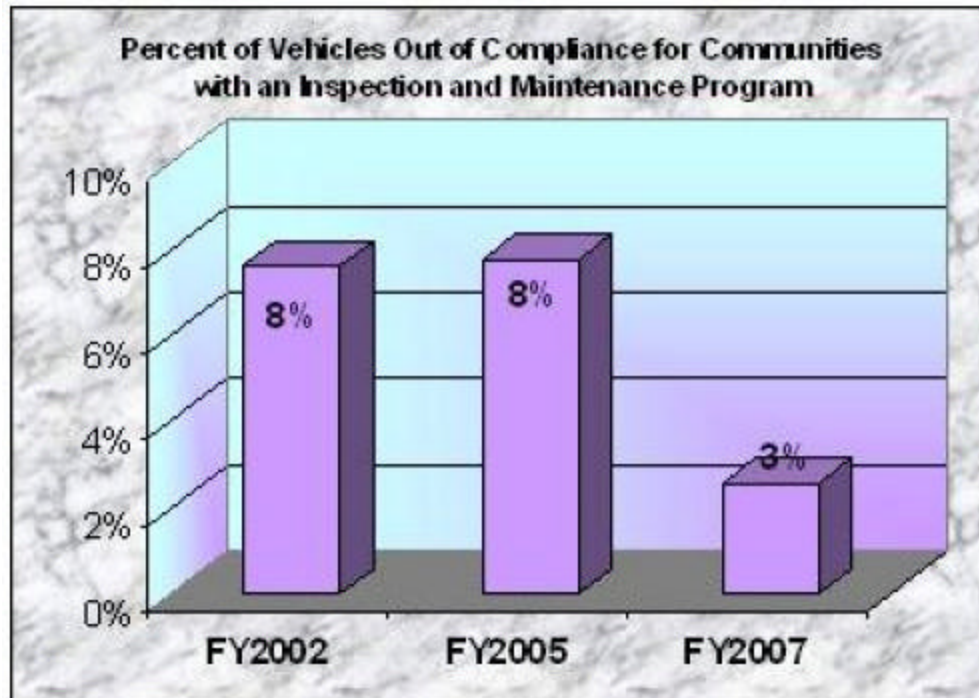
**Analysis of results and challenges:** Results for this measure are calculated by dividing the number of permits issued within the quarter in 130 days or less by the total number of permits issued during the quarter. The clock starts when a complete application is received and any applicable fees have been paid. If additional information is needed, the clock stops until the information is provided.

The percentage of permits issued within 130 days was down during the second, third and fourth quarters of FY2007 because of staff turnover and recruitment difficulties. One position was hired during the second quarter, but it takes nine months to a year for new staff to be fully proficient. In addition, three of the eight positions were vacant as of the end of the fourth quarter. The program expects to hire one of the vacant positions in the first quarter of FY2008 and will recruit for two vacant positions in the second quarter of FY2008.

### A3: Strategy - Minimize pollution from gasoline vehicles.

**Target #1:** For communities that have Inspection and Maintenance (I/M) programs, no more than 5% of vehicles are found to be out of compliance with tailpipe requirements.

**Measure #1:** % of vehicles found to be out of compliance.



**Analysis of results and challenges:** Anchorage and Fairbanks exceeded health based standards for carbon monoxide in 1972. This required the start of a vehicle inspection program in 1985. Vehicles registered in both communities must pass an emission inspection to be registered or have their registration renewed by DMV. In addition, vehicle owners who live outside of Anchorage or Fairbanks but commute to work and school inside these locales are required to have an inspection.

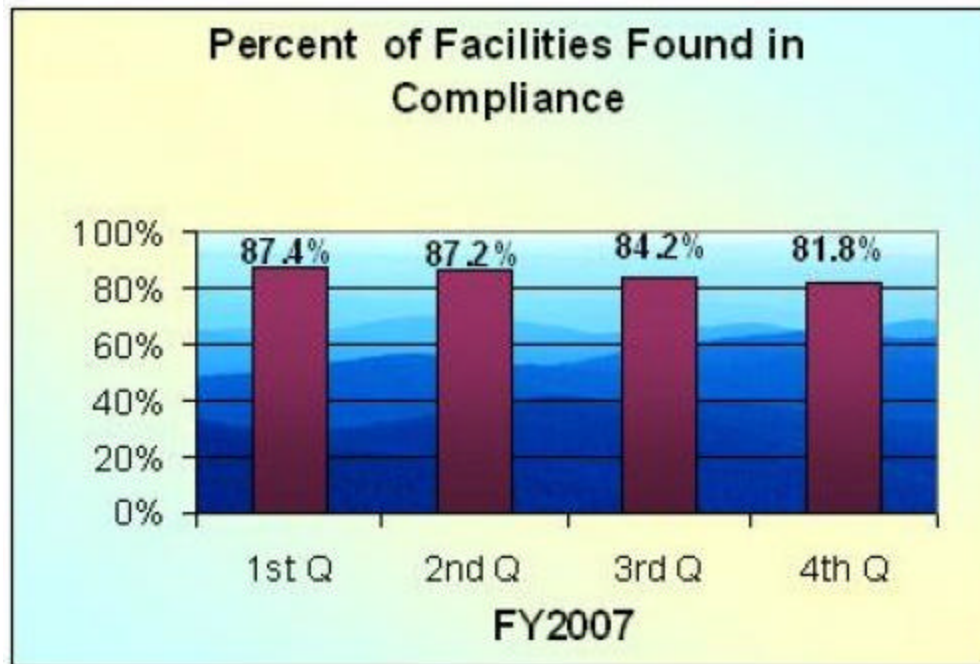
To determine compliance with the vehicle inspection program, the department performs a survey of in-use vehicles every other year in Anchorage and Fairbanks, recording the license plate and windshield sticker information. In order to be statistically valid, approximately 10,000 non-duplicative vehicle license plate recordings are needed in Anchorage and approximately 6,000 in Fairbanks. In-use vehicle records from the survey are electronically compared to the I/M inspection database, which can identify whether the vehicle has a current inspection.

The time and location for each survey is selected very carefully. Surveys are not conducted during evenings or weekends. Emphasis is placed on areas used by the local resident, businesses, and school parking lots. Information is collected in winter when carbon monoxide problems exist. Those vehicles that do not need an inspection are excluded. The time necessary to collect the number of vehicle observations is very labor intensive. Due to these limitations of time and expense, data is collected once every two years. FY2007 data currently displayed was for surveys conducted in January to March, 2007. Data collection is next scheduled for January to March of 2009.

**A4: Strategy - Minimize pollution from stationary sources.**

**Target #1:** 100% of facilities requiring air permits are in compliance.

**Measure #1:** % of facilities found in compliance, or on an enforceable compliance schedule, or subject to formal enforcement action by the department.



**Analysis of results and challenges:** These figures represent the number of permitted stationary sources that have unaddressed compliance issues and the total number of permitted sources. Air program inspectors record data regarding source compliance issues found through public complaints, permittee self-reporting, and during the inspectors' scheduled compliance evaluations. The program evaluates compliance status of each major permitted source no less than once every two years and the compliance status of each synthetic minor permitted source no less than once every five years.

In FY2005, the percentage of permitted sources found in compliance was 92 percent. Compliance rates dropped to the mid 80 percent range in FY2007 and we attribute this downward trend to recordkeeping and data tracking improvements.

## Spill Prevention and Response Results Delivery Unit

### Contribution to Department's Mission

Reduce unlawful oil and hazardous substance contamination in the environment.

### Core Services

- Manage Division resources to protect public health and the environment through the safe handling and cleanup of oil and hazardous substances.
- Ensure that producers, transporters and distributors of crude oil and refined oil products prevent oil spills, and are fully prepared materially and financially to clean up spills.
- Prevent and mitigate the effects of oil and hazardous substance releases and ensure their cleanup through government planning and rapid response.
- Oversee and conduct cleanups at contaminated sites in Alaska and prevent releases from underground storage tanks and unregulated aboveground storage tanks.
- Manage the Oil and Hazardous Substance Release Prevention and Response Fund as a viable, long-term funding source for the state's core spill prevention and response initiatives.

End Result	Strategies to Achieve End Result
<p><b>A: Land and water is not contaminated by spills of oil and hazardous substances.</b></p> <p><u>Target #1:</u> 10% increase from the previous year in the number of historical contaminated sites remediated.</p> <p><u>Measure #1:</u> % increase from the previous year in the number of historical contaminated sites remediated.</p> <p><u>Target #2:</u> 98% of new spills are cleaned up or are in monitoring status.</p> <p><u>Measure #2:</u> % of new spills are cleaned up or are in monitoring status.</p>	<p><b>A1: Establish standards for protection from spills of oil and hazardous substances.</b></p> <p><u>Target #1:</u> Review and update all regulations by FY2010.</p> <p><u>Measure #1:</u> % of regulations reviewed and updated.</p> <p><b>A2: Contain and cleanup incidents of contamination to the environment from oil and hazardous substance spills.</b></p> <p><u>Target #1:</u> 100% response to reports of new contamination from oil and hazardous substance spills.</p> <p><u>Measure #1:</u> % of reports of new contamination responded to.</p> <p><b>A3: Prevent spills of oil and hazardous substances.</b></p> <p><u>Target #1:</u> Reduce number of new spills of oil and hazardous substances from regulated industry.</p> <p><u>Measure #1:</u> % change in number of new spills of oil and hazardous substances from regulated industry.</p>

### Major Activities to Advance Strategies

- Ensure emergency response and removal of oil and hazardous substance releases.
- Ensure the remediation of contaminated sites.
- Review regulated facility and vessel applications for compliance with oil discharge prevention and contingency plan requirements.
- Review oil discharge prevention and contingency plan requirements and update regulations.

### FY2009 Resources Allocated to Achieve Results

**FY2009 Results Delivery Unit Budget: \$17,012,100**

**Personnel:**

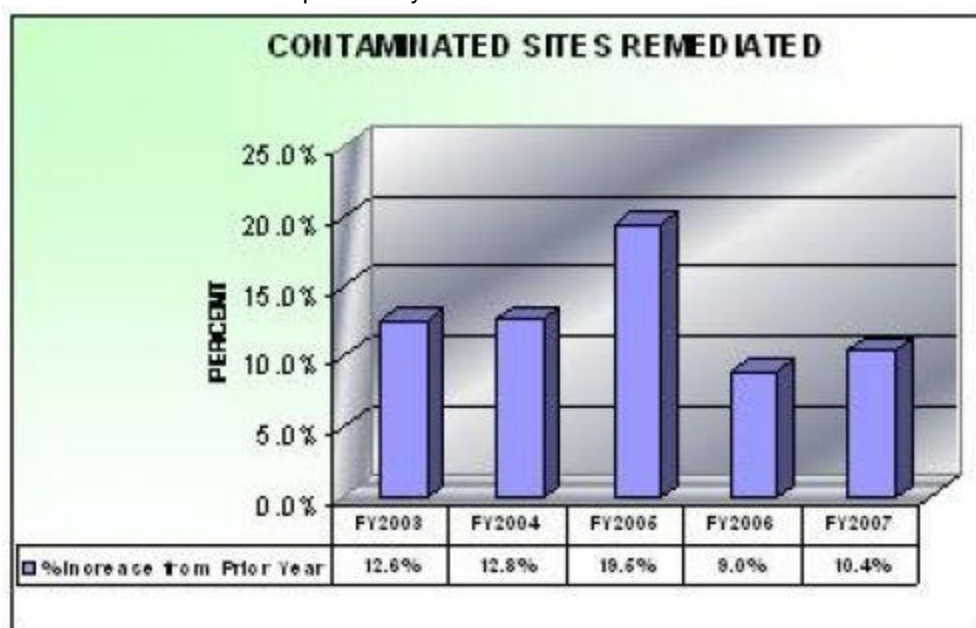
Full time	147
Part time	1
<b>Total</b>	<b>148</b>

### Performance Measure Detail

#### A: Result - Land and water is not contaminated by spills of oil and hazardous substances.

**Target #1:** 10% increase from the previous year in the number of historical contaminated sites remediated.

**Measure #1:** % increase from the previous year in the number of historical contaminated sites remediated.

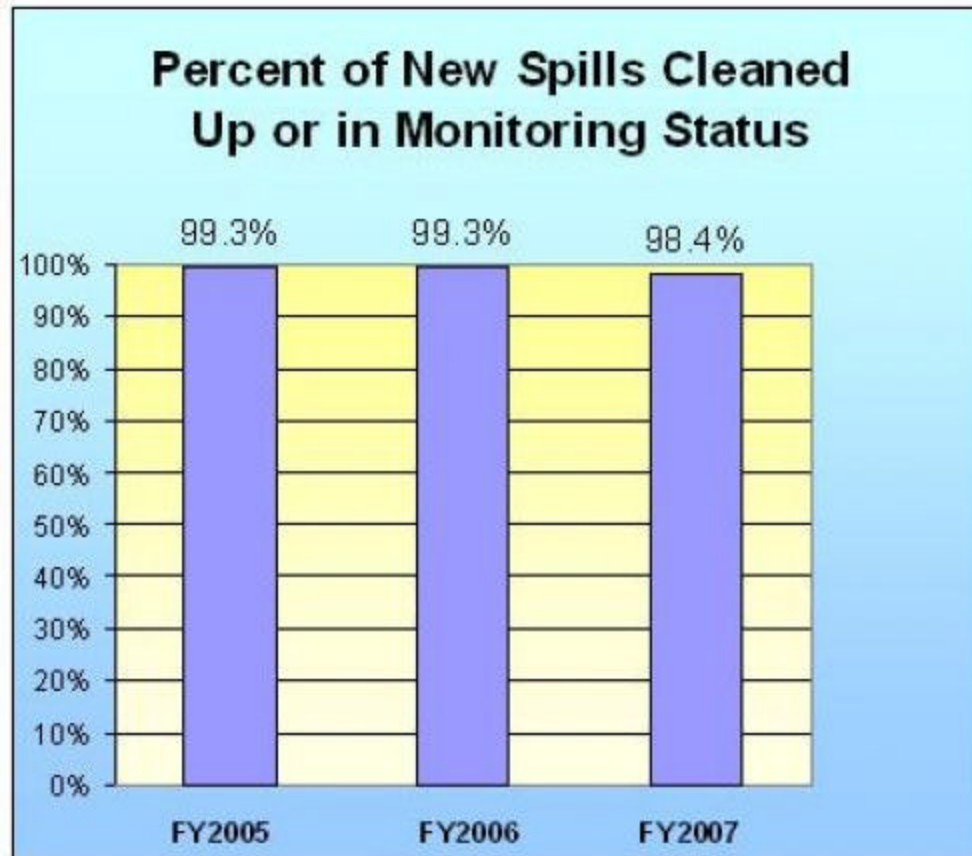


**Analysis of results and challenges:** Alaska has many sites that have been contaminated with oil or hazardous substances. Most of the contamination is historic, much of it occurring before the risks to the environment and human health were known. Additional historic contaminated sites are discovered almost daily. Severely contaminated sites may also have adverse economic and social impacts in terms of cleanup costs, or limitations on land use, land sales, or transfers.

2007 performance data shows that our 10% increase goal was met. The Contaminated Sites program has modified our cleanup strategy to focus short term resources at sites with a higher level risk to human health and the environment. When performing cleanups, we now focus on removing risk rather than reaching closure. Once risk is reduced at a site to a point where human health is not impacted, resources are then directed toward other sites where risk is still a factor – even though the first site has not been closed. Due to this change in our strategy, Contaminated Sites is implementing a new measurement approach to allow tracking of risk reduction, in addition to closures. Transition to this new tool, the Exposure Tracking Model, will begin in our FY2010 performance measure narrative.

**Target #2:** 98% of new spills are cleaned up or are in monitoring status.

**Measure #2:** % of new spills are cleaned up or are in monitoring status.



**Analysis of results and challenges:** The sooner a spill of oil or hazardous substances is contained and cleaned, the less impact it will have on the environment, on human health and on the economy. Our goal is to respond to, contain, and clean up spills as they occur to prevent them from causing wide-spread damage to water sources, land, wildlife, and adjoining properties.

When sites are in monitoring status, they have been cleaned to a point that allows continued use of the site. Frequently, this will include removing and storing contaminated soils, which are monitored during field visits until the contamination has declined to a level that meets acceptable state standards.

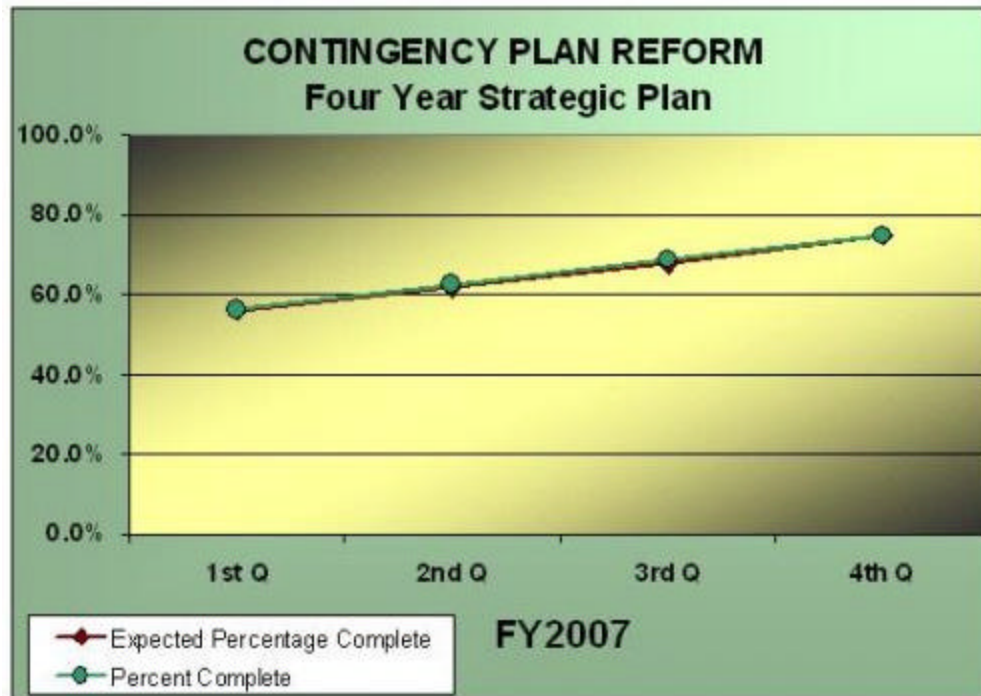
Only the largest and most complex new spills, such as spills that impact ground water are turned over to the contaminated sites program for long-term remediation.

Data indicates that in FY2007, 98.4% of new spills reported were contained and cleaned to a point that allows continued use of property with no further cleanup action required.

## A1: Strategy - Establish standards for protection from spills of oil and hazardous substances.

**Target #1:** Review and update all regulations by FY2010.

**Measure #1:** % of regulations reviewed and updated.



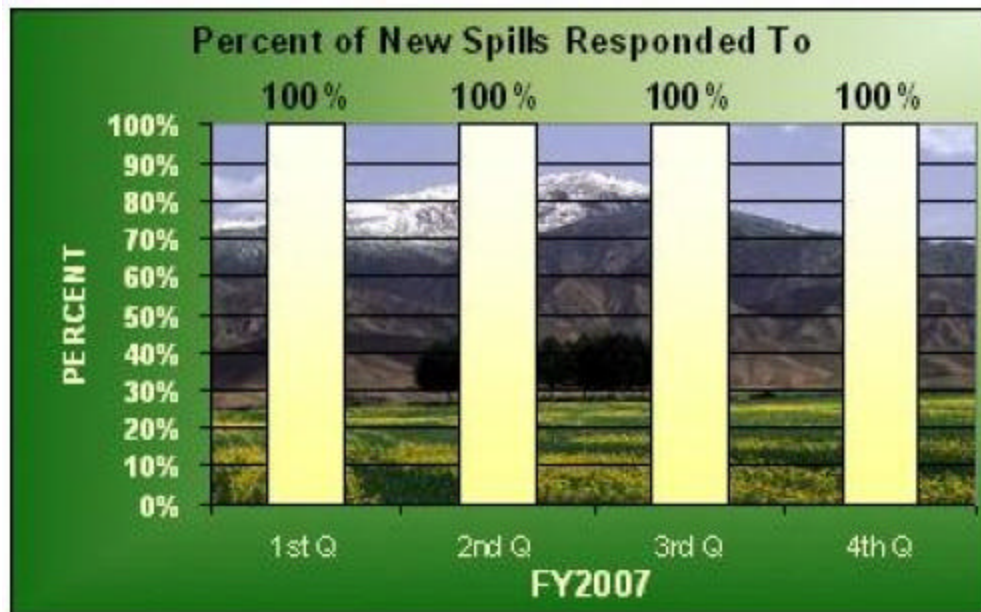
**Analysis of results and challenges:** As part of the Department's 4-year plan, regulations governing contingency plan (C-plan) preparation are being reviewed for clarity and effectiveness toward meeting the objectives they are meant to accomplish.

The division has completed Phase 1 of a four-phase, multi-year project to comprehensively review, revise, and update the C-plan regulations at 18 AAC 75. Phase 1 was an update of C-plan regulations for oil exploration and production facilities. Final regulations for Phase 1 became effective May 26, 2004. Phase 2, a review and update of the oil pollution prevention regulations, has begun. Phase 3 will consist of a review and revision of the C-plan approval process, and Phase 4 will be a comprehensive update of general C-plan requirements.

## A2: Strategy - Contain and cleanup incidents of contamination to the environment from oil and hazardous substance spills.

**Target #1:** 100% response to reports of new contamination from oil and hazardous substance spills.

**Measure #1:** % of reports of new contamination responded to.



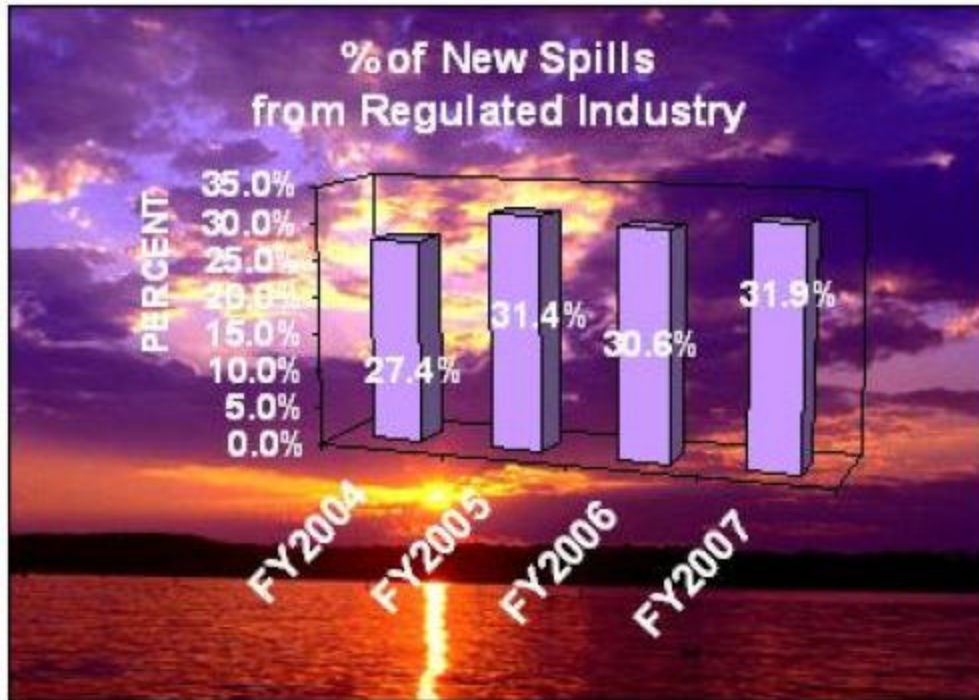
**Analysis of results and challenges:** Regulations require that spills of oil or hazardous substances be reported to the Department of Environmental Conservation. Depending on the size and nature of the spill, a response may range from providing verbal instruction to the responsible party to deployment of division staff, equipment, and contractors. Regardless of size, the sooner a spill of oil or hazardous substances is contained and cleaned, the less impact it will have on the environment, on human health and on the economy.

In FY2007, the division has met the goal of 100% in responding to new spills.

### A3: Strategy - Prevent spills of oil and hazardous substances.

**Target #1:** Reduce number of new spills of oil and hazardous substances from regulated industry.

**Measure #1:** % change in number of new spills of oil and hazardous substances from regulated industry.



**Analysis of results and challenges:** Regulated industry includes such things as oil exploration and production facilities, refineries, railroads, crude oil pipelines, terminals, tank farms and tankers, non-crude oil tank vessels and barges, and non-tank vessels. Regulations require that new spills be reported, regardless of source. However, because of the high volume of oil handled or carried by these entities, and the potential consequences of a major spill, additional requirements are placed upon them, including development of spill prevention plans and contingency plans for response to spills.

The increase in spills in the fourth quarter is consistent with quarterly data from previous years and is due to increased oil production, exploration, and transportation that occur in the spring. Additionally, as harsher weather begins to subside, spills that occurred during the winter months are discovered.

Certain components of oil facilities are not regulated under state law. A challenge with interpreting and recording this data is identifying whether the spill originated from the regulated component of the facility.

## Component: Contaminated Sites Program

### Contribution to Department's Mission

Protect public health and the environment by identifying, overseeing and conducting the cleanup, redevelopment, and management of contaminated sites in Alaska.

### Core Services

- Identify, assess, rank, prioritize, and track all contaminated sites in Alaska.
- Oversee the cleanup and long term monitoring of contaminated sites in Alaska.
- Conduct cleanups of highest-priority state-owned, privately owned, and orphan sites using a risk based approach.
- Manage cleanup and provide regulatory oversight for military, federal agency, private party and State owned contaminated sites.
- Provide regulatory oversight, technical assistance, and policy development to Department of Defense and Federal Civilian Agencies on environmental cleanup activities.
- Negotiate with responsible parties, private or federal, for funding agreements to provide effective cleanup of contaminated sites.
- Manage conditionally closed contaminated sites to ensure risk is appropriately controlled over time.
- Provide technical assistance to responsible parties of contaminated sites.

End Result	Strategies to Achieve End Result
<b>A: Risk from contamination at historical contaminated sites is reduced.</b>  <u>Target #1:</u> 10% increase from the previous year in the number of historical contaminated sites remediated. <u>Measure #1:</u> % increase from the previous year in the number of historical contaminated sites remediated.	<b>A1: Reduce historical contamination.</b>  <u>Target #1:</u> Remediation of historical contamination. <u>Measure #1:</u> % of existing contaminated sites closed or conditionally closed.

### Major Activities to Advance Strategies

- Provide regulatory oversight and management of contaminated sites to facilitate closures.
- Conduct cleanups of state owned and orphan sites.
- Manage long term monitoring of conditionally closed sites to limit risk to public health and the environment.

### FY2009 Resources Allocated to Achieve Results

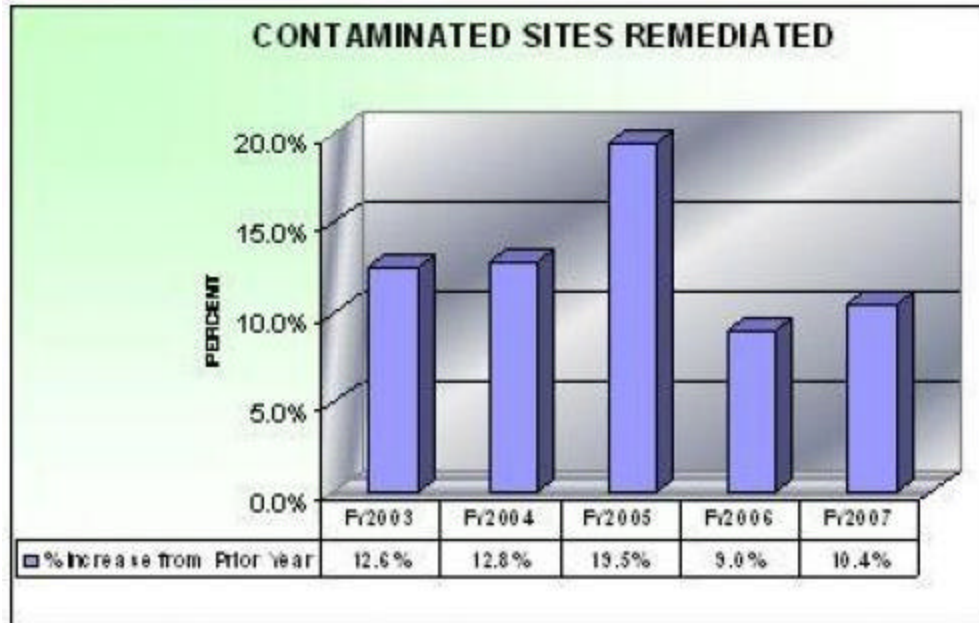
<b>FY2009 Component Budget: \$7,051,100</b>	<b>Personnel:</b>	
	Full time	65
	Part time	0
	<b>Total</b>	<b>65</b>

## Performance Measure Detail

**A: Result - Risk from contamination at historical contaminated sites is reduced.**

**Target #1:** 10% increase from the previous year in the number of historical contaminated sites remediated.

**Measure #1:** % increase from the previous year in the number of historical contaminated sites remediated.



**Analysis of results and challenges:** Alaska has many sites that have been contaminated with oil or hazardous substances. Most of the contamination is historic, much of it occurring before the risks to the environment and human health were known, and additional historic contaminated sites are discovered almost daily. Severely contaminated sites may also have adverse economic and social impacts in terms of cleanup costs, or limitations on land use, land sales, or transfers.

Our 2007 performance data shows that our 10% increase goal was met while for 2006 the performance data was 1% shy of our goal. The 2005 closure percentage was particularly high due to 170 cleanups at the former Adak Naval Air Station and was an anomaly.

The Contaminated Sites program is in the process of changing our site prioritization to better focus our resources at sites with a higher level risk to human health and the environment. Facilitating this change, Contaminated Sites is implementing a new measurement approach to allow tracking of risk reduction, in addition to closures. Transition to this new tool, the Exposure Tracking Model, will begin in our FY2010 performance measure narrative.

**A1: Strategy - Reduce historical contamination.**

**Target #1:** Remediation of historical contamination.

**Measure #1:** % of existing contaminated sites closed or conditionally closed.



**Analysis of results and challenges:** Alaska has many sites that have been contaminated with oil or hazardous substances. The total number of known contaminated sites at the end of FY2007 was 6,388. This represents an increase of 101 new sites since July 1, 2006. Most of the contamination is historic, much of it occurring before the risks to the environment and human health were known. Severely contaminated sites may also have adverse economic and social impacts in terms of cleanup costs, or limitations on land use or land sales or transfers.

The quarterly percentages reflected in this chart are based on the cumulative number of contaminated sites closed out with no further action required in relation to the cumulative number of known contaminated sites. Moreover, it is important that historic contaminated sites are found and reported, so that appropriate steps can be taken to protect the public. However, as the data shows, for every site that is cleaned or cleaned to a point that allows a closure or conditional closure, nearly as many contaminated sites are discovered each year, making it a challenge to show progress toward reducing the number of contaminated sites in the state.

Our goal is to continue remediating sites at a rate that exceeds the relative percentage of total sites remediated the previous year. However, results will continue to fluctuate depending on the number of new historic sites discovered as well as the amount of work necessary to reduce the risks at new and already existing sites.

## Component: Industry Preparedness and Pipeline Operations

### Contribution to Department's Mission

Protect public safety, public health and the environment by ensuring that producers, transporters and distributors of crude oil and refined oil products prevent oil spills, and are fully prepared materially and financially to clean up spills.

### Core Services

- Review and approval of oil discharge prevention and contingency plans.
- Conduct and participate in spill drills to verify by demonstration that regulated operators are in compliance with state response planning requirements.
- Inspect regulated facilities and vessels to provide assistance and to ensure compliance with state spill prevention and Best Available Technology (BAT) requirements.
- Review and approve applications for proof of financial responsibility to ensure that regulated operators have the financial resources to respond to an oil spill and mitigate environmental damage.
- Register oil spill primary response action contractors identified in oil discharge prevention and contingency plans.
- Regulate and provide technical assistance and training to underground storage tank operators and owners to ensure proper tank operation and maintenance and basic spill prevention.
- Certify third party underground storage tank inspectors.

End Result	Strategies to Achieve End Result
<p><b>A: Regulated facilities and vessel operators are able to prevent and respond to spills of oil and hazardous substances.</b></p> <p><u>Target #1:</u> 100% of regulated facilities and vessel operators are without major violations of their contingency plans.</p> <p><u>Measure #1:</u> % of regulated facilities and vessels operators are without major violation of their contingency plans within the past year.</p>	<p><b>A1: Review oil discharge prevention and contingency plan requirements and update regulations as necessary.</b></p> <p><u>Target #1:</u> Oil discharge prevention and contingency plan regulations are reviewed and updated by FY2010.</p> <p><u>Measure #1:</u> % of review and update of oil discharge prevention and contingency plan regulations complete.</p> <p><b>A2: Review and approve contingency plans.</b></p> <p><u>Target #1:</u> Contingency plan applications are reviewed within the regulatory timeframes.</p> <p><u>Measure #1:</u> % contingency plan applications reviewed within the regulatory timeframes.</p> <p><b>A3: Conduct exercises and inspections of regulated facilities and vessel operators.</b></p> <p><u>Target #1:</u> Annually 100% of contingency plan holders identified as high risk, are inspected or participate in an oil discharge exercise.</p> <p><u>Measure #1:</u> % of annual targeted inspections and exercises completed.</p>

### Major Activities to Advance Strategies

- Review oil discharge prevention and contingency plan requirements and improve and expand the regulations to

### Major Activities to Advance Strategies

increase clarity and effectiveness.

- Review and expand oil spill prevention oversight of industry, including new regulations and increased regulatory oversight of higher risk operations.
- Review regulated facility and vessel applications for compliance with oil discharge prevention and contingency plan requirements.
- Inspect and conduct spill response exercises at facilities and vessels identified as high risk.

### FY2009 Resources Allocated to Achieve Results

**FY2009 Component Budget: \$4,327,100**

**Personnel:**

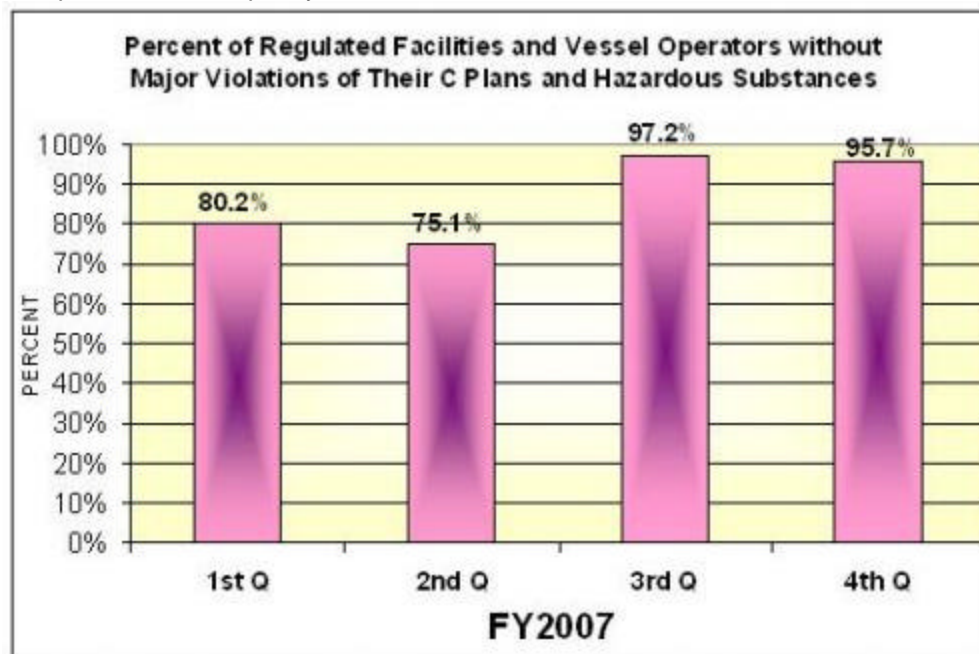
Full time	39
Part time	1
<b>Total</b>	<b>40</b>

### Performance Measure Detail

#### A: Result - Regulated facilities and vessel operators are able to prevent and respond to spills of oil and hazardous substances.

**Target #1:** 100% of regulated facilities and vessel operators are without major violations of their contingency plans.

**Measure #1:** % of regulated facilities and vessels operators are without major violation of their contingency plans within the past year.



**Analysis of results and challenges:** In Alaska, several types of regulated facilities and vessel operators are required to have approved contingency plans (C-plans) in place before they are allowed to operate. These C-plans outline the various steps and procedures that would be followed to allow quick and effective containment and cleanup in the event of an unanticipated release of oil or hazardous substances into the

environment. The quicker and more effective the response is, the less adverse impact a spill will have on the environment and human health.

Facilities and operators required to have C-plans include oil exploration and oil production facilities, refineries, railroads, crude oil pipelines, terminals, tank farms, and tankers, non-crude oil tank vessels and barges, and non-tank vessels. C-plans must be submitted every 5 years and are reviewed and approved by Department staff to ensure all response requirements are addressed. Examples of major violations would include such things as insufficient or unusable response equipment, lack of required contracts with response action contractors, or significant changes to a facility's oil storage capacity without a corresponding amendment of the C-plan.

### **A1: Strategy - Review oil discharge prevention and contingency plan requirements and update regulations as necessary.**

**Target #1:** Oil discharge prevention and contingency plan regulations are reviewed and updated by FY2010.

**Measure #1:** % of review and update of oil discharge prevention and contingency plan regulations complete.



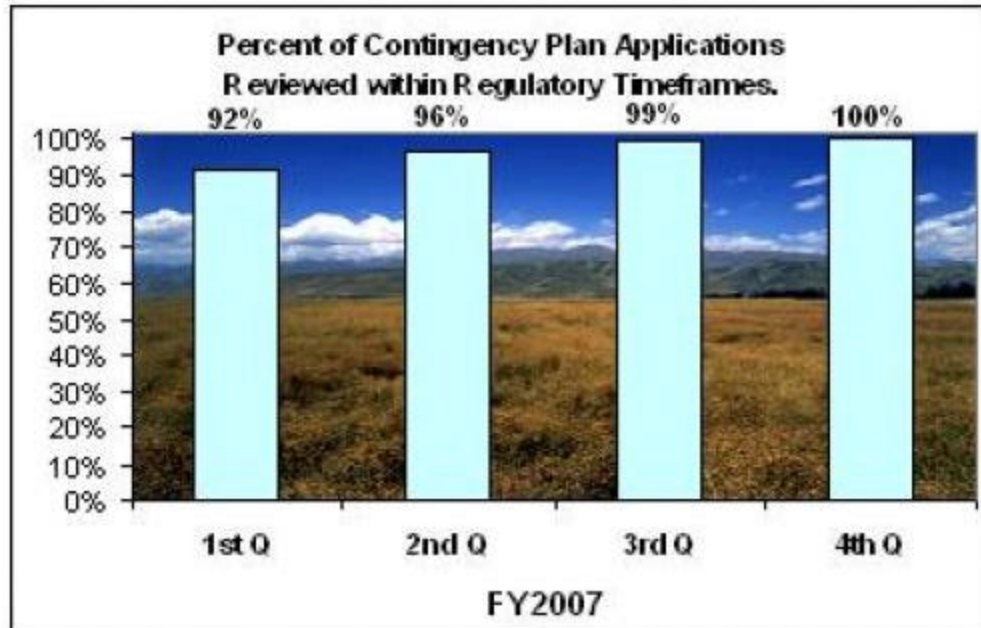
**Analysis of results and challenges:** In Alaska, several types of facilities and vessel operators are required to have approved contingency plans (C-plans) in place before they are allowed to operate. These C-plans outline the various steps and procedures that would be followed to allow quick and effective containment and cleanup in the event of an unanticipated release of oil or hazardous substances into the environment. The quicker and more effective the response is, the less adverse impact a spill will have on the environment and human health.

As part of the Department's 4-year plan, regulations governing C-plan preparation and approval are being reviewed for clarity and effectiveness. Phase 1 of this 4-phase project, relating to oil exploration and production facilities was completed in FY2006. Phase 2, relating to oil spill prevention, was completed in FY2007. The Department is on track to achieve its target by 2010.

**A2: Strategy - Review and approve contingency plans.**

**Target #1:** Contingency plan applications are reviewed within the regulatory timeframes.

**Measure #1:** % contingency plan applications reviewed within the regulatory timeframes.



**Analysis of results and challenges:** In Alaska, several types of facilities and vessel operators are required to have approved contingency plans (C-plans) in place before they are allowed to operate. These C-plans outline the various steps and procedures that would be followed to allow quick and effective containment and cleanup in the event of an unanticipated release of oil or hazardous substances into the environment. The quicker and more effective the response is, the less adverse impact a spill will have on the environment and human health.

Facilities and operators required to have C-plans include oil exploration and oil production facilities, refineries, railroads, crude oil pipelines, terminals, tank farms, and tankers, non-crude oil tank vessels and barges, and non-tank vessels. C-plans must be submitted every 5 years and are reviewed and approved by Department staff to ensure all response requirements are addressed.

Since these facilities and vessels operators cannot legally operate without approved C-plans, it is imperative that department staff review and approve the plans within the time frames required by regulation. Thus far, this goal has been met and future challenges to attaining the goal are not anticipated.

### A3: Strategy - Conduct exercises and inspections of regulated facilities and vessel operators.

**Target #1:** Annually 100% of contingency plan holders identified as high risk, are inspected or participate in an oil discharge exercise.

**Measure #1:** % of annual targeted inspections and exercises completed.



**Analysis of results and challenges:** In Alaska, several types of facilities and vessel operators are required to have approved contingency plans (C-plans) in place before they operate. These C-plans outline the various steps and procedures that would be followed to allow quick and effective containment and cleanup in the event of an unanticipated release of oil or hazardous substances into the environment. The quicker and more effective the response is, the less adverse impact a spill will have on the environment and human health.

Facilities and operators required to have C-plans include oil exploration and oil production facilities, refineries, railroads, crude oil pipelines, terminals, tank farms, oil tankers, non-crude oil tank vessels and barges, and non-tank vessels over 400 gross tons. C-plans must be submitted every 5 years and are reviewed and approved by Department staff to ensure all response requirements are addressed.

Facilities and vessels in the state that handle crude oil are considered a higher risk because of the larger volumes of oil involved and the increased environmental consequences of a crude oil spill compared to refined oil product spill of a similar magnitude. As an added precaution, it is important to inspect high risk facilities to ensure compliance with their C-plan, or to test C-plan effectiveness by conducting exercises. In an exercise, a mock spill is conducted, and the C-plan response procedures are applied as though it were a real life situation, in order to test and ensure their effectiveness.

The annual cumulative totals typically exceed 100% due to repeat inspections and/or exercises at some facilities.

## Component: Prevention and Emergency Response

### Contribution to Department's Mission

Protect public safety, public health and the environment by preventing and mitigating the effects of oil and hazardous substance releases and ensuring their cleanup through government planning, preparedness and rapid response.

### Core Services

- Lead the state's response and protect public and environmental resources from the effects of some 2,100 spills of oil and hazardous substances.
- Minimize the damage to public health and the environment by implementing the Incident Command System for large events.
- Oversee cleanup by the responsible party to ensure spills are cleaned up as quickly as possible.
- Intervene when spill response is inadequate.
- Integrate coastal and inland Alaska communities into a statewide response system through local response agreements.
- Provide equipment and training to local personnel and communities participating in the Alaska Spill Response Depot/Corps System.
- Prevent and reduce the occurrence of oil spills and hazardous substance releases from unregulated sources.
- Plan, develop and coordinate the statewide hazardous materials response team to protect public health and the environment from the effects of hazardous substance releases.
- Maintain the Federal/State Unified Plan and the ten Sub-area/Regional Contingency Plans for Alaska.
- Enforce statutes and regulations relating to oil and hazardous substance spill reporting, cleanup and restoration of the environment.

End Result	Strategies to Achieve End Result
<b>A: Risk from new spills of oil and hazardous substances by regulated and unregulated entities, is eliminated.</b>  <u>Target #1:</u> No new spills result in long-term remediation. <u>Measure #1:</u> % of spills needing long-term remediation.	<b>A1: Clean up new oil and hazardous substance spills.</b>  <u>Target #1:</u> 98% of new oil and hazardous substance spills are cleaned up or are in monitoring status. <u>Measure #1:</u> % of new oil and hazardous substance spills that are cleaned or are in monitoring status.

### Major Activities to Advance Strategies

- Ensure emergency response and removal of oil and hazardous substance releases.
- Increase funding for full-time agency oil and hazardous substance prevention, response, and oversight of North Slope exploration and production.
- Implement a Clean Marina/Fishing Vessel spill prevention pilot project and evaluate the project for statewide application.

### FY2009 Resources Allocated to Achieve Results

**FY2009 Component Budget: \$3,931,200**

**Personnel:**

Full time 36

Part time 0

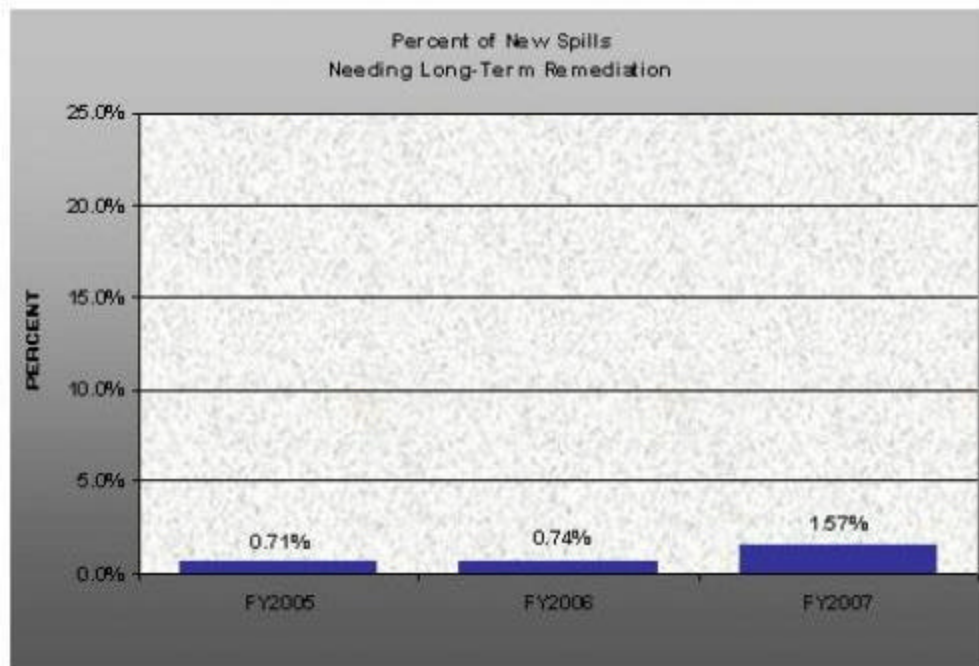
**Total** 36

### Performance Measure Detail

#### A: Result - Risk from new spills of oil and hazardous substances by regulated and unregulated entities, is eliminated.

**Target #1:** No new spills result in long-term remediation.

**Measure #1:** % of spills needing long-term remediation.



**Analysis of results and challenges:** The sooner a spill of oil or hazardous substances is contained and cleaned, the less impact it will have on the environment, on human health and on the economy. Our goal is to respond to, contain, and clean spills as they occur to prevent them from causing wide-spread damage to water sources, land, wildlife, and adjoining properties.

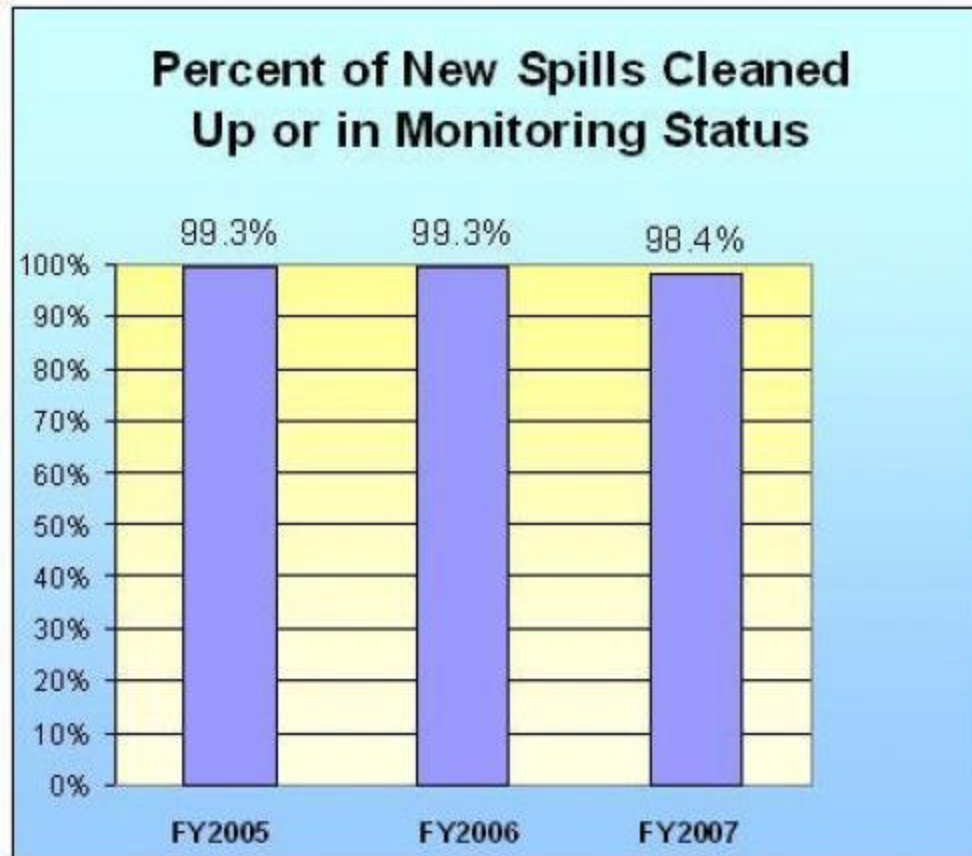
Only the largest and most complex new spills, for example, spills that impact ground water, are turned over to the contaminated sites program for long-term remediation.

Data indicates that 1.57% of new spills in FY07 will require long-term remediation. The increase of spills transferred to the Contaminated Sites Program is due to a backlog of data entry which resulted in subsequent case transfers in FY07. This group of sites has been transferred to the Contaminated Sites Program for long-term remediation.

**A1: Strategy - Clean up new oil and hazardous substance spills.**

**Target #1:** 98% of new oil and hazardous substance spills are cleaned up or are in monitoring status.

**Measure #1:** % of new oil and hazardous substance spills that are cleaned or are in monitoring status.



**Analysis of results and challenges:** The sooner a spill of oil or hazardous substances is contained and cleaned, the less impact it will have on the environment, on human health and on the economy. Our goal is to respond to, contain, and clean spills as they occur to prevent them from causing wide-spread damage to water sources, land, wildlife, and adjoining properties.

When sites are in monitoring status, they have been cleaned to a point that allows continued use of the site. Frequently, this will include removing and storing contaminated soils, which are monitored during field visits until the contamination has declined to a level that meets acceptable state standards.

Only the largest and most complex new spills, for example, spills that impact ground water, are turned over to the contaminated sites program for long-term remediation.

The FY07 data indicates that 98.4% of new spills are contained cleaned up or in monitoring status.

## Component: Response Fund Administration

### Contribution to Department's Mission

Manage the Oil and Hazardous Substance Release Prevention and Response Fund as a viable, long-term funding source for the state's core spill prevention and response initiatives and provide administrative support services to divisions programs.

### Core Services

- Management of the Prevention and Response Accounts of the Oil and Hazardous Substance Release Prevention and Response Fund.
- Recover state costs for responding to spills.
- Track and report all operating and capital expenditures and fund source balances to program managers monthly.
- Manage and coordinate receipt and expenditure of federal dollars for cleanup of federal facilities.
- Develop cost controls and standardize division contracts.
- Manage term contracts and issue Notices to Proceed (NTPs).
- Provide guidance and assistance to other Spill Prevention and Response programs in general administrative functions such as budget preparation, expenditure tracking, human resources, and procurement.
- Provide administrative and financial support during emergency spill response situations.
- Manage and track funding under the charter agreement.
- Manage Reimbursable Services Agreements for the division.

End Result	Strategies to Achieve End Result
<p><b>A: State is reimbursed for funds spent on cleanup or remediation of oil or hazardous substance spills caused by private and/or federal entities.</b></p> <p><u>Target #1:</u> 80% of cost recoverable state funding spent on cleanup or remediation of oil or hazardous substance spills caused by private and/or federal entities is recovered.</p> <p><u>Measure #1:</u> % of state funding reimbursed for cost recoverable expenditures incurred on cleanup or remediation of oil or hazardous substance spills caused by private and/or federal entities.</p>	<p><b>A1: Provide adequate documentation to the Department of Law for cost recoverable sites.</b></p> <p><u>Target #1:</u> Adequate documentation is provided for 100% of cost recoverable sites.</p> <p><u>Measure #1:</u> % of cost recoverable sites with adequate documentation for billings.</p>

### Major Activities to Advance Strategies

- Identify and pursue sources of cost recovery to assist in funding response, removal and remediation of oil and hazardous substance releases.
- Manage term contracts and issue Notices to Proceed to implement cleanup of contaminated sites.
- Provide financial management of federal contracts to ensure expenditure of federal dollars are maximized and spent appropriately.

### FY2009 Resources Allocated to Achieve Results

**FY2009 Component Budget: \$1,449,400**

**Personnel:**

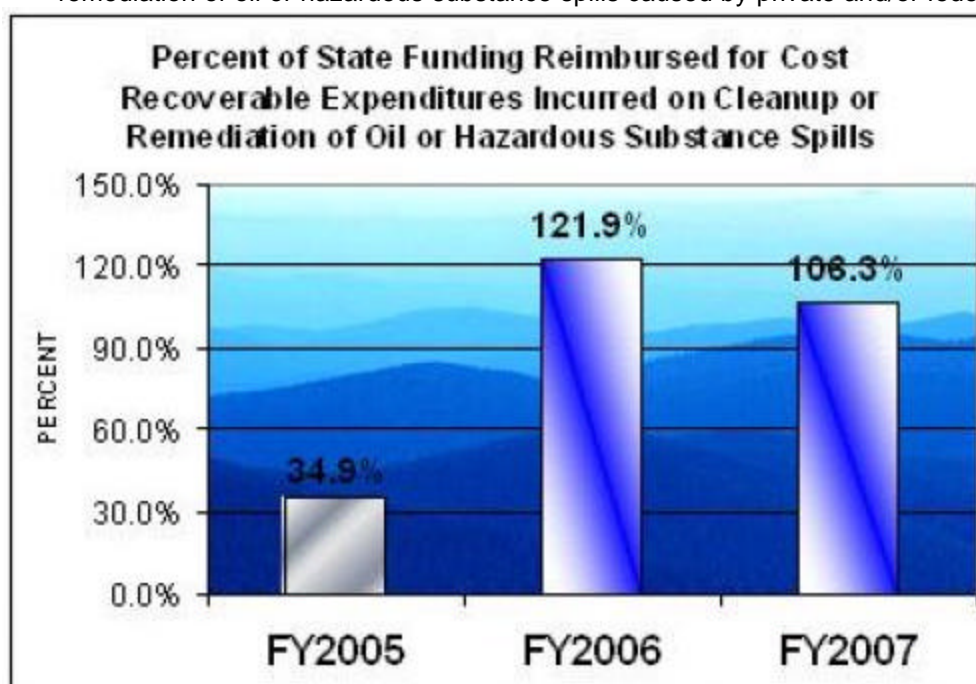
Full time	5
Part time	0
<b>Total</b>	<b>5</b>

### Performance Measure Detail

#### A: Result - State is reimbursed for funds spent on cleanup or remediation of oil or hazardous substance spills caused by private and/or federal entities.

**Target #1:** 80% of cost recoverable state funding spent on cleanup or remediation of oil or hazardous substance spills caused by private and/or federal entities is recovered.

**Measure #1:** % of state funding reimbursed for cost recoverable expenditures incurred on cleanup or remediation of oil or hazardous substance spills caused by private and/or federal entities.



**Analysis of results and challenges:** When the state incurs expenditures for response, cleanup, or remediation of a spill or contamination caused by oil or hazardous substances, Alaska statutes require the department promptly seek reimbursement for those costs. Once a party or parties responsible for a spill or contamination is identified, they are notified of their possible financial responsibility. In cases lacking an identified responsible party the state either absorbs the cost of cleanup or requests reimbursement through the National Pollution Fund Center if it is determined that the spill condition meet their specific criteria. State expenditures for travel, contractual, supplies, equipment, and legal guidance are tracked for each site. Staff time is tracked and an average salary cost for each position classification is applied to ensure that personal services costs are equitably charged. As costs accumulate, a summary invoice with backup documentation is prepared on a quarterly basis and forwarded to project managers for review and validation. Billing packages are forwarded to Department of Law where they are reviewed and sent to the responsible party(s).

Not all costs are recovered in the same year as the expenditures. After billings are sent, it may take several

months, or even several years to actually recover costs, depending on the size and complexity of the spill. Due to the time lag between billings and receipt of payments, more may be recovered in a single year than was expended. Data that covers several years will provide the best picture of cost recovery success.

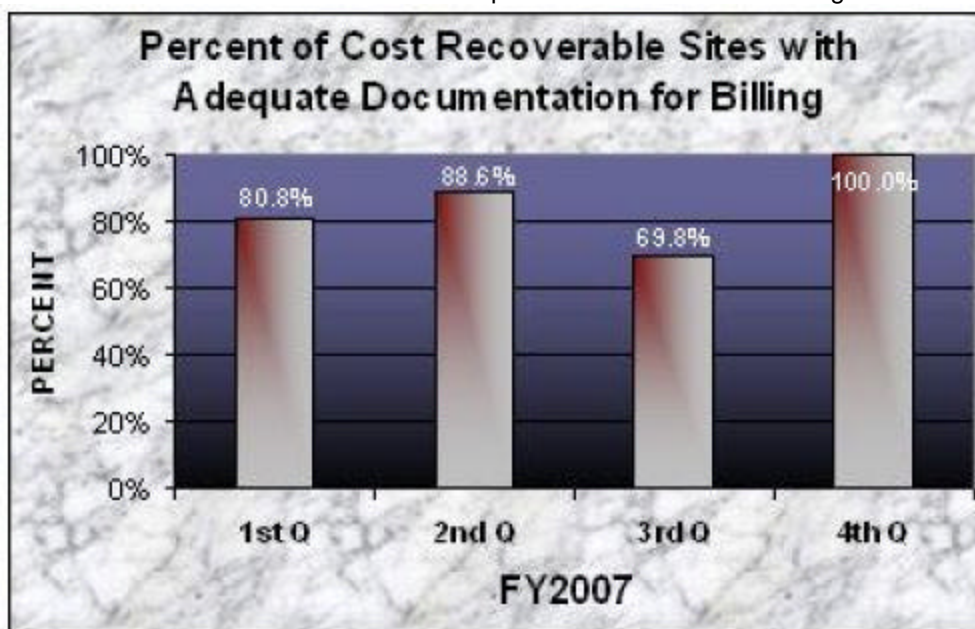
Cost recovery efforts for the Selendang response were quite extensive, complex and time consuming to prepare which created a backlog in the daily cost recovery efforts. The contrast between FY2005 and FY2006 illustrates this point.

The FY2007 data indicates that the Response Fund Administration program is clearly on track to meet or exceed the 80% target.

### **A1: Strategy - Provide adequate documentation to the Department of Law for cost recoverable sites.**

**Target #1:** Adequate documentation is provided for 100% of cost recoverable sites.

**Measure #1:** % of cost recoverable sites with adequate documentation for billings.



**Analysis of results and challenges:** When the state incurs expenditures for response, cleanup, or remediation of a spill or contamination from oil or hazardous substances caused by non-state entities, we are obligated to try to recover those costs. Once a party or parties responsible for a spill or contamination is identified, they are notified of their possible financial responsibility. State expenditures for travel, contractual, supplies, equipment and legal guidance are tracked for each site. Hours spent by staff are tracked and documented on Site Logs, and an average salary cost is applied so that personal services costs are equitably charged rather than being based on actual range and step of an employee. As costs accumulate, a summary invoice with backup documentation is prepared on a quarterly basis and forwarded to project managers for review and validation. Next, the Response Fund Administration prepares the billing packages and submits this billing information to the Department of Law.

During the third quarter of FY2007, the billing amount was almost as much as the first two quarters of FY2007 combined. The larger the state cost, the more involved the billing process is. Therefore, the additional time required to research and prepare adequate documentation for billing caused a dip in third quarter activity.

## Water Results Delivery Unit

### Contribution to Department's Mission

Protect water quality and assist communities in improving sanitation conditions.

### Core Services

- Improve water quality conditions where they are below public health or environmental standards.
- Issue wastewater discharge permits to facilities and operations that release potentially harmful pollutants.
- Ensure facility compliance with permit conditions.
- Provide community assistance for the protection of water quality.
- Develop user friendly public access to water quality data.
- Provide grants, loans and engineering assistance for drinking water, sewerage, and solid waste facilities.
- Provide training programs for and certification of water and sewerage system operators.
- Provide over-the-shoulder and emergency assistance to system operators in remote communities.

End Result	Strategies to Achieve End Result
<b>A: Water quality is protected.</b>  <u>Target #1:</u> No polluted waters. <u>Measure #1:</u> Number of polluted waters.	<b>A1: Establish protective standards for water quality.</b>  <u>Target #1:</u> Protective standards are established for Water Quality are complete by June 30, 2007. <u>Measure #1:</u> % of revisions to targeted standards for Water Quality are complete by June 30, 2007.  <b>A2: Assume control from the EPA of National Pollutant Discharge Elimination System (NPDES) as established in the Clean Water Act.</b>  <u>Target #1:</u> 100% of EPA information requests are responded to within agreed upon timeframes. <u>Measure #1:</u> % of EPA information requests are submitted on time.  <b>A3: Restore polluted waterbodies to their designated uses.</b>  <u>Target #1:</u> Two waterbody recovery plans per year. <u>Measure #1:</u> Number of polluted waterbody recovery plans completed during the year.  <u>Target #2:</u> Ten active restoration projects per year. <u>Measure #2:</u> Number of active restoration projects during the year.  <b>A4: Issue discharge permits/authorizations.</b>  <u>Target #1:</u> 100% of known dischargers have current permits/authorizations. <u>Measure #1:</u> % of known dischargers have current permits/authorizations.

	<p><b>A5: Enforce compliance with permit/authorization conditions.</b></p> <p><u>Target #1:</u> Dischargers requiring permits are compliant with permit/authorization terms and conditions.</p> <p><u>Measure #1:</u> % of permit holders requiring enforcement actions.</p>
End Result	Strategies to Achieve End Result
<p><b>B: Citizens are protected from unsafe sanitation facilities.</b></p> <p><u>Target #1:</u> 100% serviceable rural Alaska homes are served by safe and sustainable sanitation facilities.</p> <p><u>Measure #1:</u> % of serviceable rural Alaska homes served by safe and sustainable sanitation facilities.</p>	<p><b>B1: Allocate funding based on health related needs.</b></p> <p><u>Target #1:</u> 2.5% annual reduction in rural sanitation deficiencies that are health related.</p> <p><u>Measure #1:</u> % reduction of rural sanitation deficiencies that are health related.</p> <p><b>B2: Increase operator certification compliance.</b></p> <p><u>Target #1:</u> 2% annual increase in the number of rural sanitation systems which comply with water treatment operator certification requirements.</p> <p><u>Measure #1:</u> % annual increase in the number of rural sanitation systems which comply with water treatment operator certification requirements.</p>

### Major Activities to Advance Strategies

- Identify Best Management Practices (BMP's) addressing all types of non-point source pollution.
- Ensure water quality standards to protect all uses of Alaska's fresh and marine waters.
- Monitor water quality and report on the health of Alaska's waters.
- Enforce the State's wastewater discharge standards through the review of cruise vessel monitoring reports and conduct independent DEC sampling.
- Conduct inspections and follow up with facility operators to correct noncompliance or take enforcement actions.
- Administer grants and loans.
- Provide engineering and technical assistance to communities.
- Train water and wastewater facility operators.

### FY2009 Resources Allocated to Achieve Results

**FY2009 Results Delivery Unit Budget: \$22,589,500**

**Personnel:**

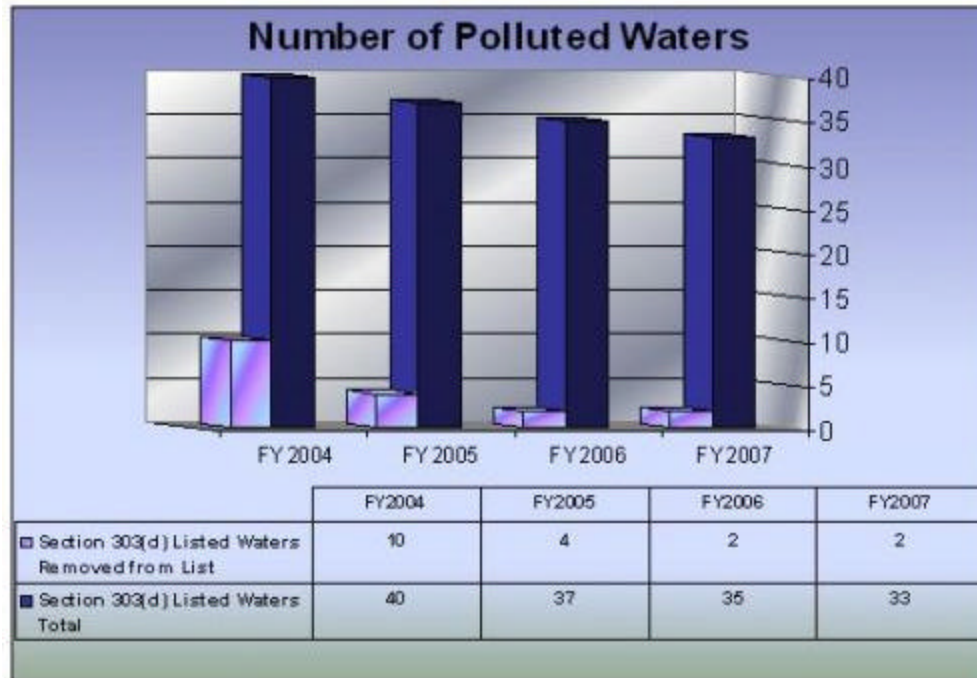
Full time	120
Part time	0
<b>Total</b>	<b>120</b>

## Performance Measure Detail

### A: Result - Water quality is protected.

**Target #1:** No polluted waters.

**Measure #1:** Number of polluted waters.



**Analysis of results and challenges:** Water Quality Standards, found in 18 AAC 70, designate specific uses for which water quality must be protected (e.g., drinking water, aquatic life) and specifies the pollutant limits, or criteria necessary to protect designated uses. There are seven designated uses for freshwater and seven for marine waters. By default, waterbodies in Alaska are protected for all designated uses. The few waterbodies that have had some uses removed are listed in the water quality standards.

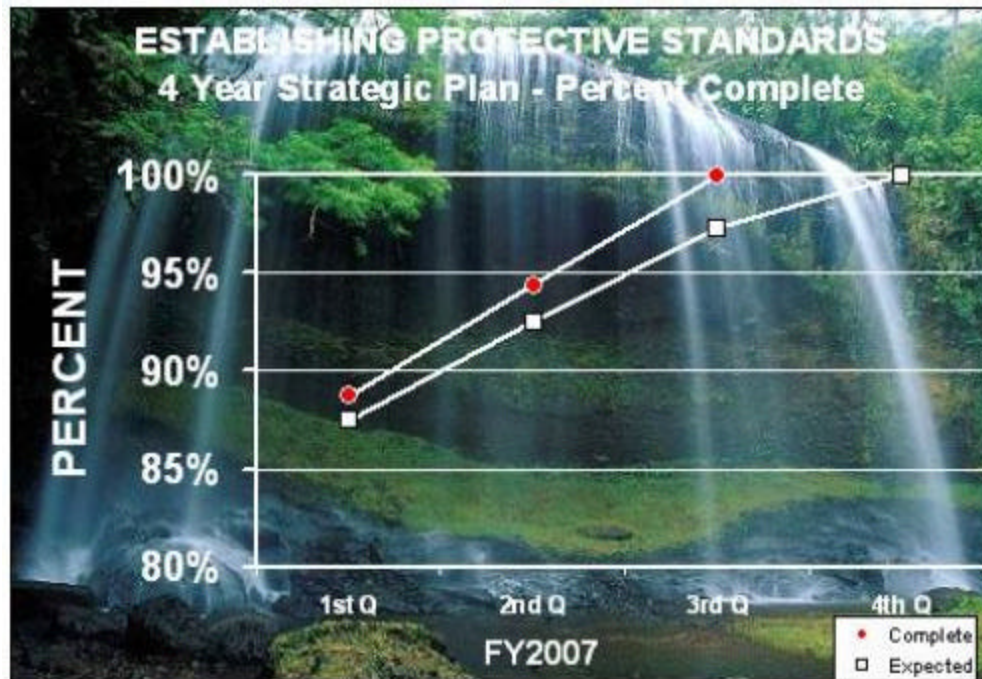
The Department of Environmental Conservation (DEC) uses Water Quality Standards as the criteria to determine if a waterbody is polluted. For example, if waterbody monitoring data consistently shows high concentrations of a substance that is not suitable for aquatic life then that waterbody is considered polluted (or impaired) for that designated use. Alaska formally reports the status and trends of its waters every two years in the Integrated Water Quality Monitoring and Assessment Report. The report includes information on the general health of Alaska's waters, DEC water protection programs and a list of impaired waterbodies, and how the impairment is being addressed or proposed to be addressed. Waterbodies are placed in one of five categories based upon known information. The report meets Alaska's responsibilities under Section 303(d) of the Clean Water Act to identify polluted waters.

As of the end of FY2007, there are 33 waterbodies listed in Category 5 - Impaired and Requiring a Total Maximum Daily Load (TMDL), which is essentially a waterbody corrective action plan. The waterbodies are scheduled for development of a TMDL over a seven-year period. Once a TMDL has been developed, an impaired water is moved into Category 4, which lists those waters which are impaired but for which a TMDL or other recovery plan is in place. In FY2007, 2 TMDLs were completed.

## A1: Strategy - Establish protective standards for water quality.

**Target #1:** Protective standards for Water Quality are complete by June 30, 2007.

**Measure #1:** % of revisions to targeted standards for Water Quality are complete by June 30, 2007.



**Analysis of results and challenges:** The federal Clean Water Act requires DEC to review and update the Alaska Water Quality Standards every three years. These standards describe the chemical, physical and biological condition of state waters (e.g. coastal marine waters, lakes, rivers) necessary to protect human health and the aquatic life living in and using the water. Water Quality Standards are used to determine wastewater permit discharge requirements, to assess whether waterbodies are polluted, and to set cleanup goals for polluted waterbody recovery plans. DEC uses both national and Alaska-specific scientific studies and regulatory policies to ensure the Water Quality Standards are relevant to Alaska's conditions and needs.

DEC has completed adoption of revised standards for mixing zones, residues, dissolved oxygen, analytical testing methods, and natural conditions. DEC is facilitating the U.S. Environmental Protection Agency review and approval of the new state Water Quality Standards, as required by the Clean Water Act. At EPA's request, DEC is developing procedures explaining how the new regulations will be implemented in NPDES wastewater discharge permits. DEC is also consulting with federal agencies on Essential Fish Habitat and the Endangered Species Act review of the new standards.

In FY2007, DEC completed the Water Quality Standards review by proposing a new procedure for implementing natural condition-based standards for those waters where water quality is naturally lower than the default statewide standard. DEC assessed options for further revisions to Water Quality Standards and developed a new 3-year workplan.

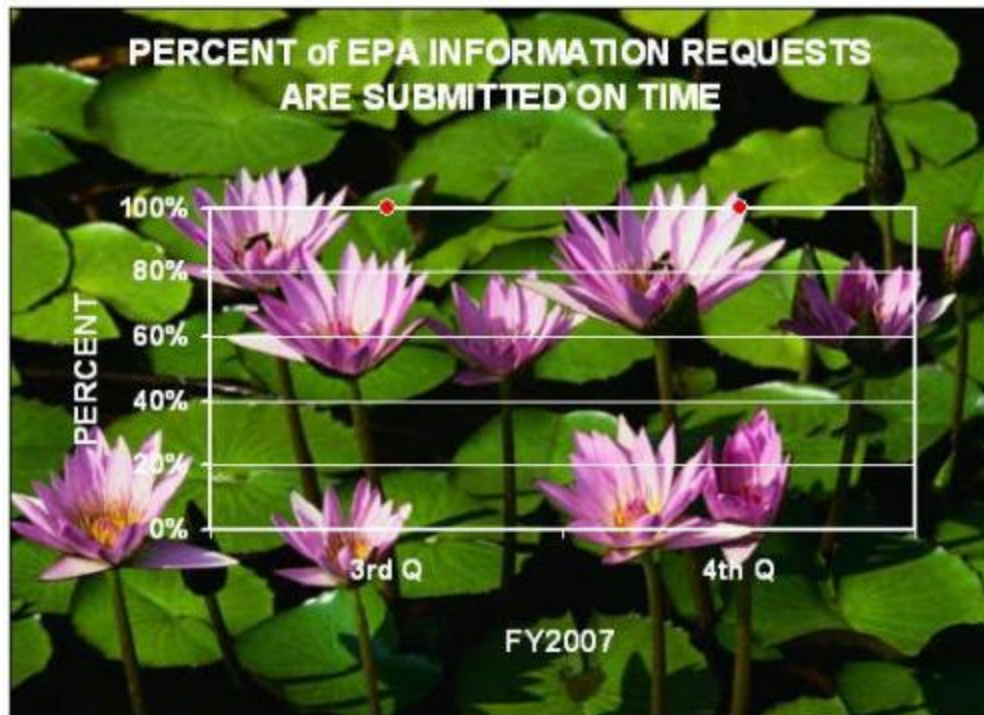
Further information on the Water Quality Standards may be found at:

<http://www.state.ak.us/dec/water/wqsar/trireview/trireview.htm>.

**A2: Strategy - Assume control from the EPA of National Pollutant Discharge Elimination System (NPDES) as established in the Clean Water Act.**

**Target #1:** 100% of EPA information requests are responded to within agreed upon timeframes.

**Measure #1:** % of EPA information requests are submitted on time.



**Analysis of results and challenges:** On August 27, 2005 the Governor signed SB110, which directs DEC to seek and assume primacy for the National Pollutant Discharge Elimination System (NPDES) wastewater permit and compliance program. DEC submitted an application to EPA for their approval on the legislatively mandated deadline of June 30, 2006.

EPA will submit a list of comments on the application. DEC will respond to information requests and supplement gaps in the application within agreed upon timeframes. This process will continue until primacy for the NPDES wastewater permit program is approved.

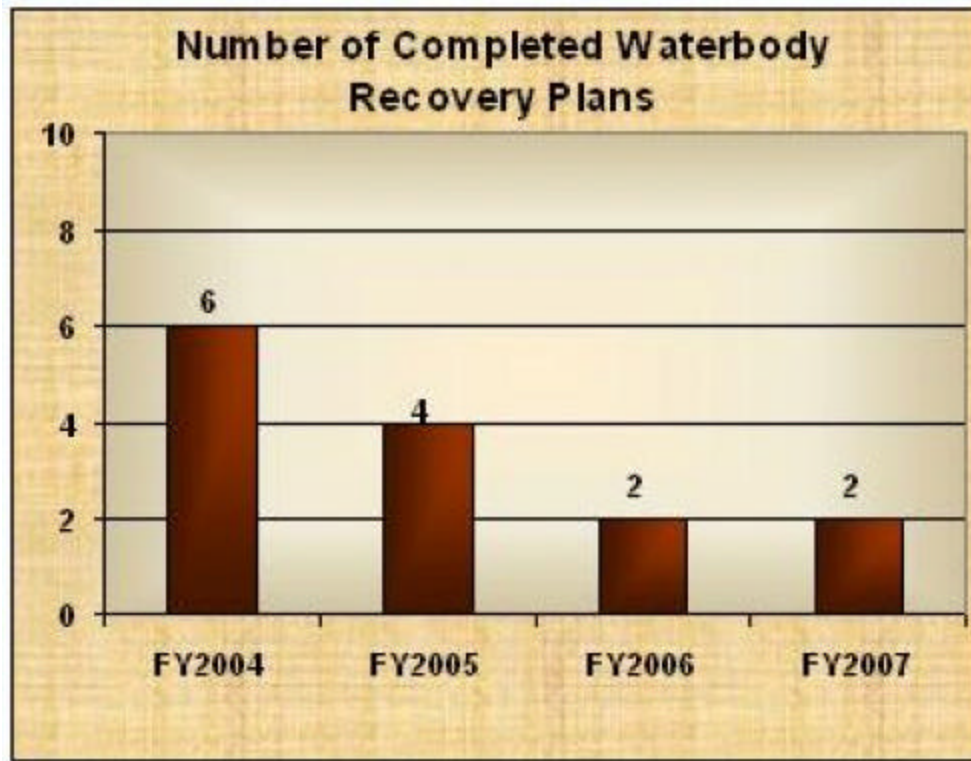
This was a new measure and no data was available until the third quarter of FY2007. During the third and fourth quarter of FY2007, DEC achieved 100% response to all EPA requests within the agreed timeframe.

More information on the state effort to gain control over the National Pollutant Discharge Elimination System program can be found at: <http://www.dec.state.ak.us/water/npdes/npdes.htm>

### A3: Strategy - Restore polluted waterbodies to their designated uses.

**Target #1:** Two waterbody recovery plans per year.

**Measure #1:** Number of polluted waterbody recovery plans completed during the year.



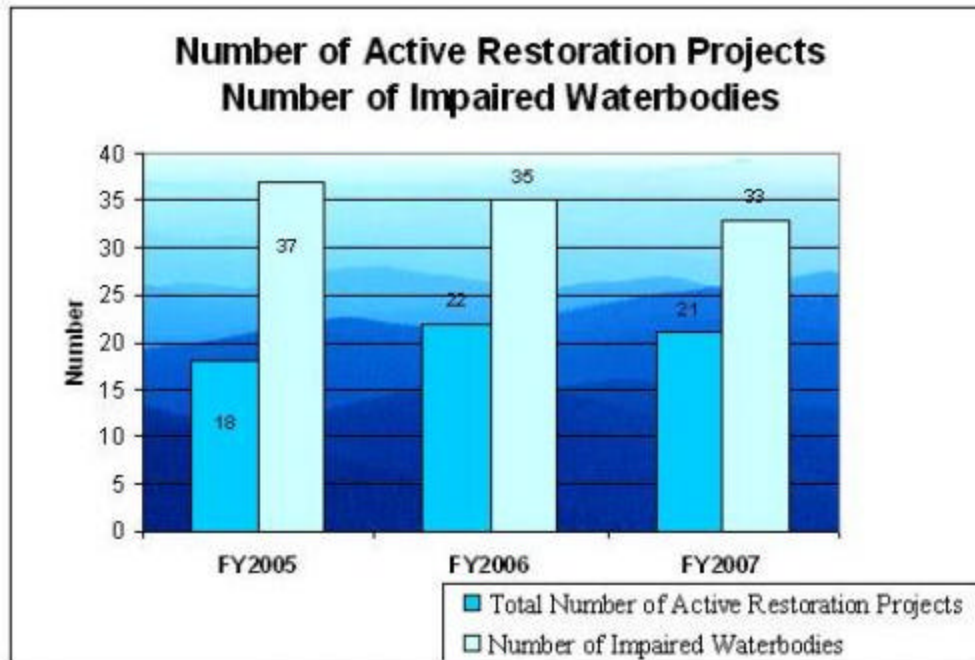
**Analysis of results and challenges:** When waterbodies are determined to be impaired (when they exceed Water Quality Standards for a particular pollutant), they are added to the Clean Water Act Section 303(d) list of impaired waterbodies submitted to the Environmental Protection Agency (EPA) every two years. It is incumbent upon the State and the EPA to work to restore waterbodies. Restoration is accomplished through the development and implementation of either a Total Maximum Daily Load (TMDL) document, a Waterbody Recovery Plan, or through the implementation of permits or other controls. These plans or permits identify the source of the pollutant and the amount of pollutants that can be introduced to the waterbody while still allowing overall recovery to proceed. With this knowledge, parties who discharge pollutants are given an "allowance," or "total maximum daily load" for that pollutant, and/or prescriptive actions called Best Management Practices (BMPs) that they must follow, to stay within that allowance.

The first step toward the recovery of an impaired waterbody is the development of the TMDL or Waterbody Recovery Plan. The EPA is required, by court order, to complete at least two of these documents in Alaska, each year. TMDLs and Waterbody Recovery Plans developed by DEC, either directly through staff work or indirectly through contract or grant efforts, are approved by the EPA and can be applied to this legal requirement. The EPA may also initiate work on TMDLs or Waterbody Recovery Plans directly, with their staff or contracted efforts.

DEC strongly supports the development and implementation of these plans and has committed to completing a minimum of two per year. Implementation is proceeding on all impaired waters.

**Target #2:** Ten active restoration projects per year.

**Measure #2:** Number of active restoration projects during the year.



**Analysis of results and challenges:** Polluted or "impaired" waterbodies are identified in the biennial "Integrated Report" submitted by DEC to the Environmental Protection Agency. The target for restoration of these waterbodies is at least 10 active restoration projects per year.

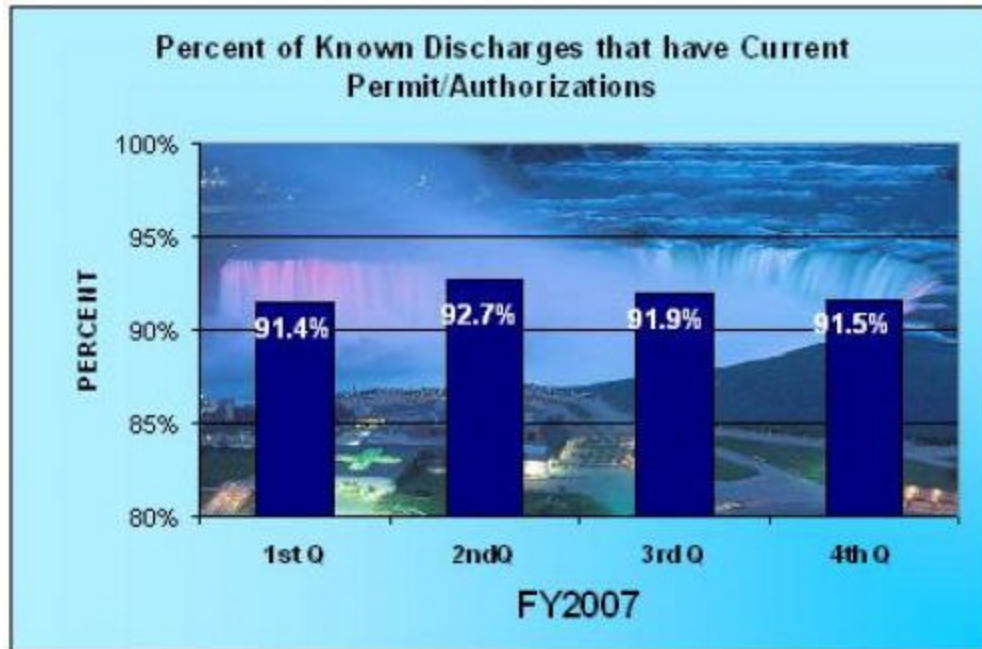
Restoration projects may be conducted by grantees who have received funds through the Alaska's Clean Water Actions (ACWA) grant program, by contractors, by other State agencies, or by DEC personnel.

Reporting began during the 3rd quarter of FY2004. Data will be reported annually at the end of each fiscal year. At the end of FY2005, 18 restoration projects were ongoing, in FY2006, 22 restoration projects were ongoing and at the end of FY2007, 21 restoration projects were ongoing on impaired waterbodies.

#### A4: Strategy - Issue discharge permits/authorizations.

**Target #1:** 100% of known dischargers have current permits/authorizations.

**Measure #1:** % of known dischargers have current permits/authorizations.



**Analysis of results and challenges:** The Wastewater Discharge Permit program issues three kinds of wastewater discharge approvals:

- 1) State individual permits and authorizations under 18 AAC 72
- 2) State permits and plan approvals of on-site disposal (septic systems) under 18 AAC 72
- 3) Certification that EPA-issued NPDES and Army Corps of Engineers wetland permits meet state water quality standards under 18 AAC 70.

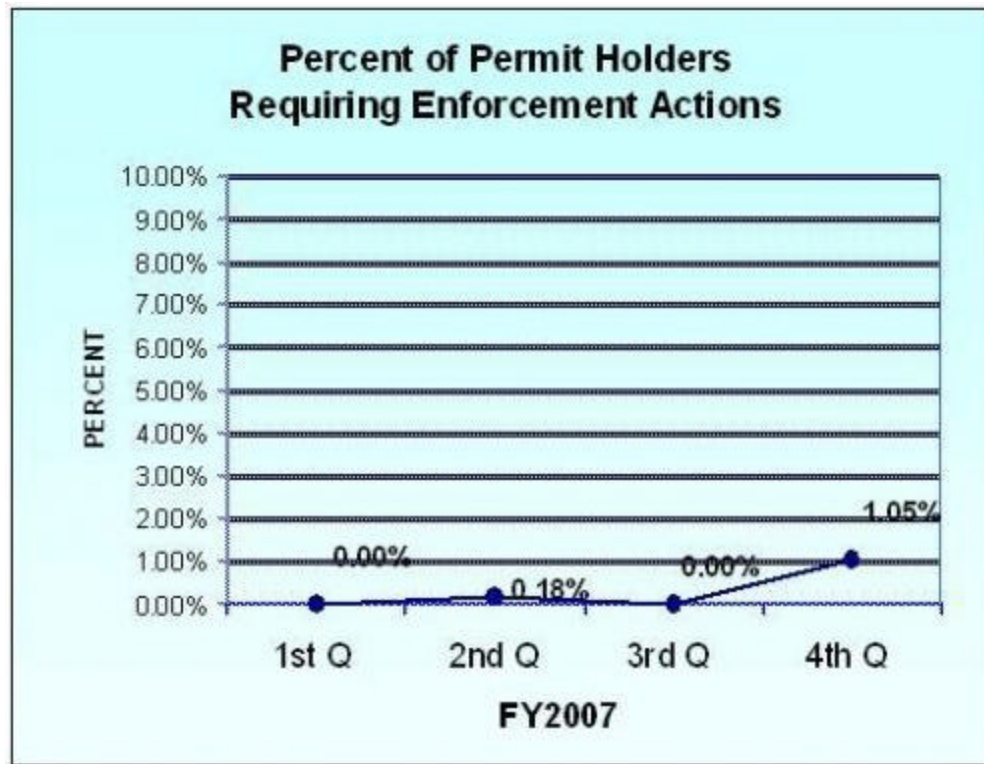
A major tool for tracking and keeping permits current is the new permit database developed in anticipation of NPDES primacy. Achieving the 100% target will be improved with automatic notification of renewals built into the system.

For more information on the Wastewater Discharge Permits program, go to:  
<http://www.dec.state.ak.us/water/wwdp/index.htm>

### A5: Strategy - Enforce compliance with permit/authorization conditions.

**Target #1:** Dischargers requiring permits are compliant with permit/authorization terms and conditions.

**Measure #1:** % of permit holders requiring enforcement actions.



**Analysis of results and challenges:** DEC can and does enforce wastewater and water quality regulations as follows:

- For failure to obtain a permit for a discharge to surface or ground water for activities requiring a permit;
- For failure to meet end-of-pipe limits or for exceeding water quality standards in the receiving water;
- For failure to comply with other permit requirements such as reporting monitoring results.

Ideally the performance measure should be 0%. Failure to obtain a permit is a clear violation while a case must be built for enforcement based on complaints, inspections, or failure to comply with a permit condition. While DEC gives compliance assistance, enforcement actions are occasionally necessary. In FY07, several DEC inspections were used to build cases for non-compliance that resulted in a EPA enforcement actions with monetary penalties.

A major tool for tracking compliance is the new permit database developed in anticipation of NPDES primacy. Electronic storage and tracking of monitoring results and reports will enable DEC to see trends in compliance for individuals and industry sectors. A new enforcement and compliance unit is planned under state NPDES primacy.

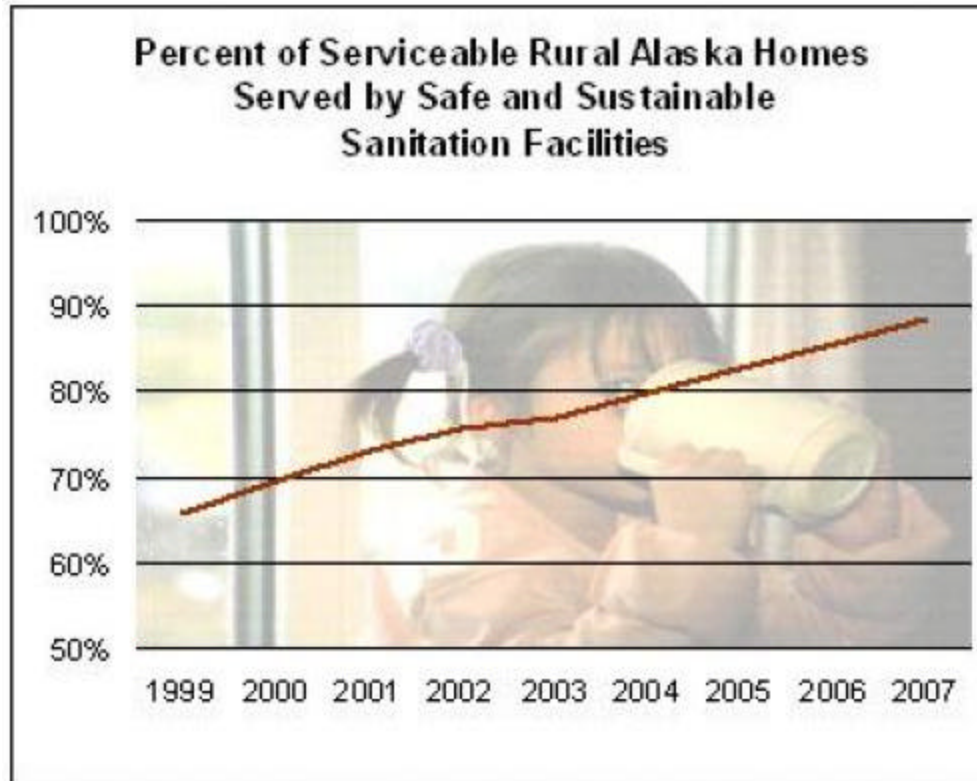
The fourth quarter increase reflects cruise vessels under a compliance order that will be covered by a new general permit now in development.

For more information on DEC's wastewater program, go to:  
<http://www.dec.state.ak.us/water/wwdp/index.htm>

**B: Result - Citizens are protected from unsafe sanitation facilities.**

**Target #1:** 100% serviceable rural Alaska homes are served by safe and sustainable sanitation facilities.

**Measure #1:** % of serviceable rural Alaska homes served by safe and sustainable sanitation facilities.



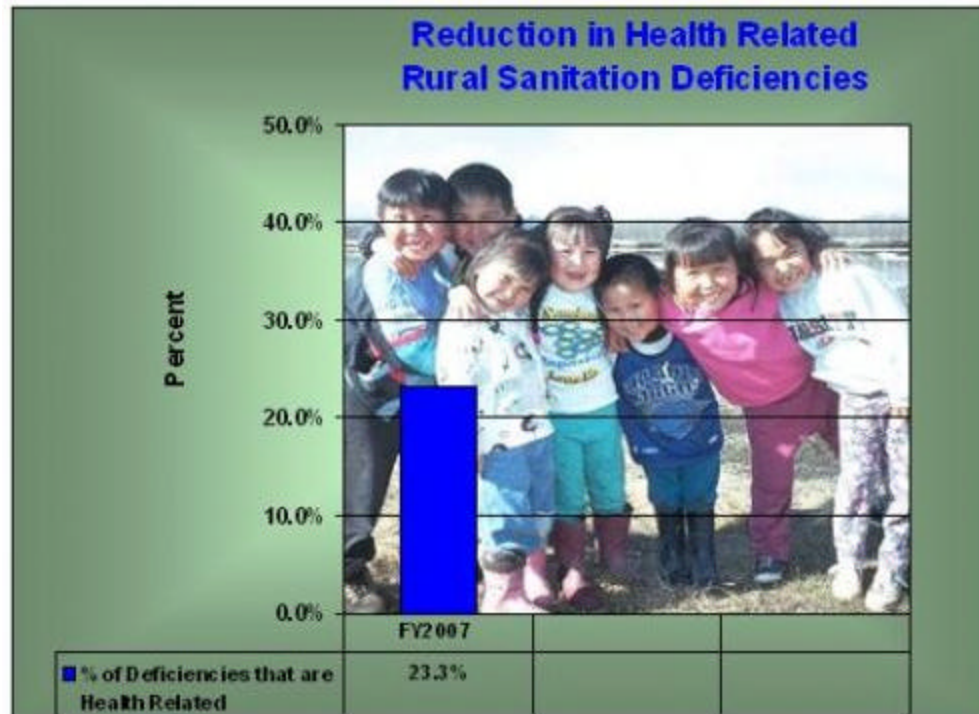
**Analysis of results and challenges:** Rural Alaska is characterized by over 280 isolated villages scattered across an area more than twice the size of Texas. The residents in many of these communities lack drinking water and wastewater infrastructure that is fundamental to protecting public health. The Village Safe Water program works to improve the health and safety of rural Alaskans by assisting communities to plan, design and construct safe and sustainable sanitation infrastructure.

Data to measure progress toward meeting the goal of all serviceable rural Alaska homes being served by safe and sustainable sanitation systems is collected on an annual basis. A serviceable home is defined as an existing home that is occupied year round and located in an area where piped, closed haul or individual septic tanks/wells are feasible. A sanitation system is defined as sustainable if the community managing it has the financial, technical and managerial capacity to properly operate and maintain it over a period which equals or exceeds the system's design life. For the last seven years, the percentage of rural Alaska homes served by adequate sanitation systems has increased by an average of 3% per year. Contingent upon the availability of funding being maintained at FY2006 levels, the program's goal continues to be an average increase of 3% per year.

## B1: Strategy - Allocate funding based on health related needs.

**Target #1:** 2.5% annual reduction in rural sanitation deficiencies that are health related.

**Measure #1:** % reduction of rural sanitation deficiencies that are health related.



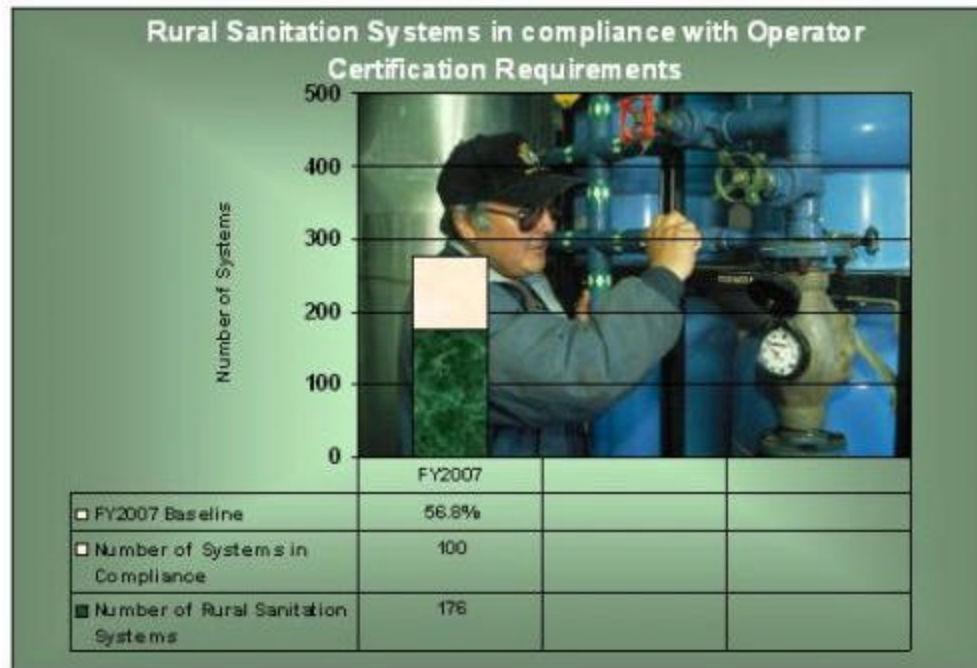
**Analysis of results and challenges:** The cost of addressing rural sanitation needs far exceeds available resources making it necessary to prioritize funding requests. Grants made available through the Village Safe Water (VSW) program are allocated based principally on a five tier ranking system that considers the relative beneficial impacts of proposed projects. The first two tiers are homes currently not served (Tier 1) and projects which will bring community drinking water supplies into compliance with public health standards (Tier 2). Since VSW's primary goal is to address sanitation deficiencies that are causing or are likely to cause public health problems, Tier 1 and 2 projects are VSW's top priority. Essential upgrades, beneficial upgrades and desired upgrades (Tiers 3, 4, and 5) are not considered health related and are not measured as a part of this strategy.

Progress in reducing sanitation deficiencies that could effect public health is quantified by the estimated cost of addressing such needs as compared to the cost of addressing all sanitation deficiencies. In FY07 (baseline year), 23% of rural Alaska sanitation needs were health related. Data related to deficiencies will be collected on an ongoing basis throughout the year and cost estimates for addressing these needs will be updated annually. The VSW program's target is to reduce sanitation needs that are health related by an average of 2.5% per year.

## B2: Strategy - Increase operator certification compliance.

**Target #1:** 2% annual increase in the number of rural sanitation systems which comply with water treatment operator certification requirements.

**Measure #1:** % annual increase in the number of rural sanitation systems which comply with water treatment operator certification requirements.



**Analysis of results and challenges:** Water treatment operators are responsible for safeguarding public health. Certification validates they have the qualifications necessary to meet this responsibility. The State's Operator Certification (OC) program classifies water systems based on their size and complexity and determines whether operators have experience and knowledge commensurate with their system's classification. In order to assist operators achieve certification, the OC program offers training and administers examinations.

Although the OC program oversees certification in water treatment, water distribution, wastewater treatment and wastewater collection, this measure is limited to water treatment certification as it is regarded as the most directly related to public health. This measure excludes communities with less than 25 residents or communities where residents obtain water on a house by house basis (private wells or rain catchments for example) since these communities are not subject to operator certification requirements.

Progress is increasing. Operator certification compliance is quantified by the number of rural sanitation systems meeting certification requirements as compared to the total number of rural sanitation systems subject to certification requirements. In FY07 (baseline year) 57% of rural sanitation systems subject to certification requirements were in compliance with such requirements. The OC program's target is to increase the number of systems in compliance by an average of 2% per year.

## Component: Water Quality

### Contribution to Department's Mission

Identify, abate, and control water pollution in a cost effective, accountable manner to protect public health and preserve the many uses of Alaska's waters.

### Core Services

- Establish and update water quality standards and criteria for the protection of Alaska waterbodies.
- Reduce non-point sources of pollution in Alaska waterbodies by identifying and implementing Best Management Practices (BMP's).
- Ensure compliance with wastewater discharge authorizations.
- Monitor cruise ship environmental and sanitation practices.
- Ensure cruise vessel compliance with wastewater discharge and air emission standards.
- Provide information about permitted discharges and commercial passenger vessel discharges.
- Conduct ambient water quality and wastewater monitoring.
- Prioritize and clean up polluted waters.
- Award and manage grants for stewardship, protection and restoration needs of waters throughout Alaska.
- Certify and provide technical assistance for domestic wastewater disposal systems.

End Result	Strategies to Achieve End Result
<b>A: Water Quality is protected.</b>  <u>Target #1:</u> No polluted waters. <u>Measure #1:</u> Number of polluted waters.	<b>A1: Establish protective standards for Water Quality.</b>  <u>Target #1:</u> Protective standards are established for Water Quality are complete by June 30, 2007. <u>Measure #1:</u> % of revisions to targeted standards for Water Quality are complete by June 30, 2007.  <b>A2: Assume control from the EPA of National Pollutant Discharge Elimination System (NPDES) as established in the Clean Water Act.</b>  <u>Target #1:</u> 100% of EPA information requests are responded to within agreed upon timeframes. <u>Measure #1:</u> % of EPA information requests are submitted on time.  <b>A3: Restore polluted waterbodies to their designated uses.</b>  <u>Target #1:</u> Two waterbody recovery plans per year. <u>Measure #1:</u> Number of polluted waterbody recovery plans completed during the year.  <u>Target #2:</u> Ten active restoration projects per year. <u>Measure #2:</u> Number of active restoration projects during the year.  <b>A4: Issue discharge permits/authorizations.</b>

	<p><u>Target #1:</u> 100% of known dischargers have current permits/authorizations.</p> <p><u>Measure #1:</u> % of known dischargers have current permits/authorizations.</p> <p><b>A5: Enforce compliance with permit/authorization conditions.</b></p> <p><u>Target #1:</u> Dischargers requiring permits are compliant with permit/authorization terms and conditions.</p> <p><u>Measure #1:</u> % of permit holders requiring enforcement actions.</p>
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### Major Activities to Advance Strategies

- Seek state primacy for permitting and compliance activities currently conducted by federal agencies.
- Certify that wetlands fill projects authorized by the Corps of Engineers meet Alaska water quality standards.
- Establish best management practices to control non-point pollution and protect water quality.
- Report to the public on the health of Alaska's waters.
- Develop and implement recovery plans for all polluted waters.
- Provide pass-through funding and technical assistance to municipalities, local groups, and other state agencies to address water quality issues.
- Revise water quality standards to ensure they continue to protect Alaska's water.
- Continue to improve a risk-based permitting and inspection program for wastewater discharges.
- Implement and improve an on-line permit application, tracking, and reporting system to speed up permit reviews and oversight.
- Establish permit by rule authorizations in regulation.

### FY2009 Resources Allocated to Achieve Results

**FY2009 Component Budget: \$15,509,400**

**Personnel:**

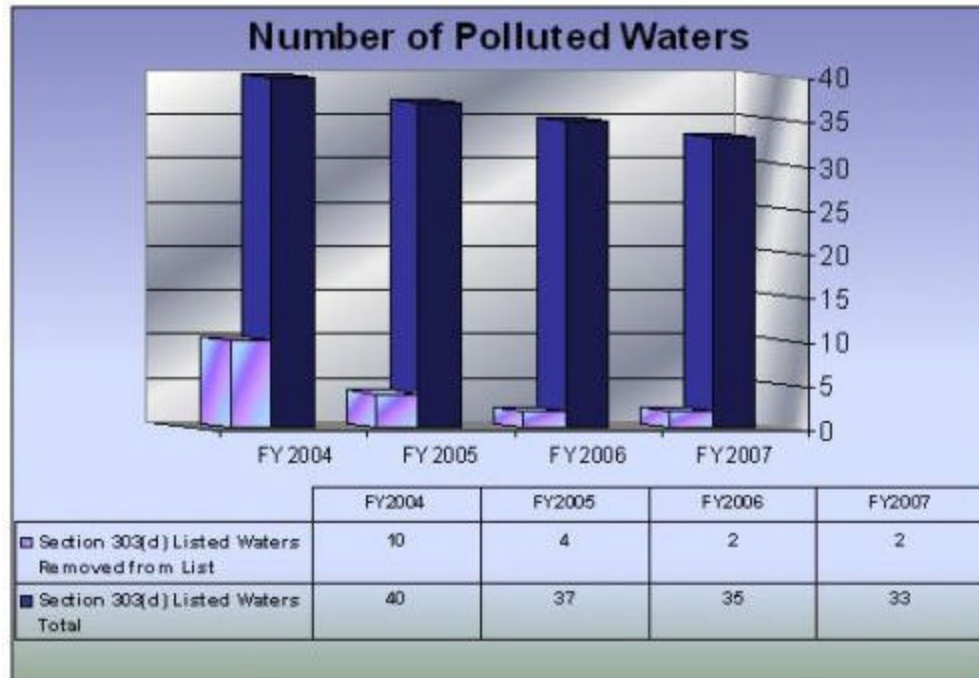
Full time	83
Part time	0
<b>Total</b>	<b>83</b>

## Performance Measure Detail

### A: Result - Water Quality is protected.

**Target #1:** No polluted waters.

**Measure #1:** Number of polluted waters.



**Analysis of results and challenges:** Water Quality Standards, found in 18 AAC, designate specific uses for which water quality must be protected (e.g., drinking water, aquatic life) and specifies the pollutant limits, or criteria necessary to protect designated uses. There are seven designated uses for freshwater and seven for marine waters. By default, waterbodies in Alaska are protected for all designated uses. The few waterbodies that have had some uses removed are listed in the water quality standards.

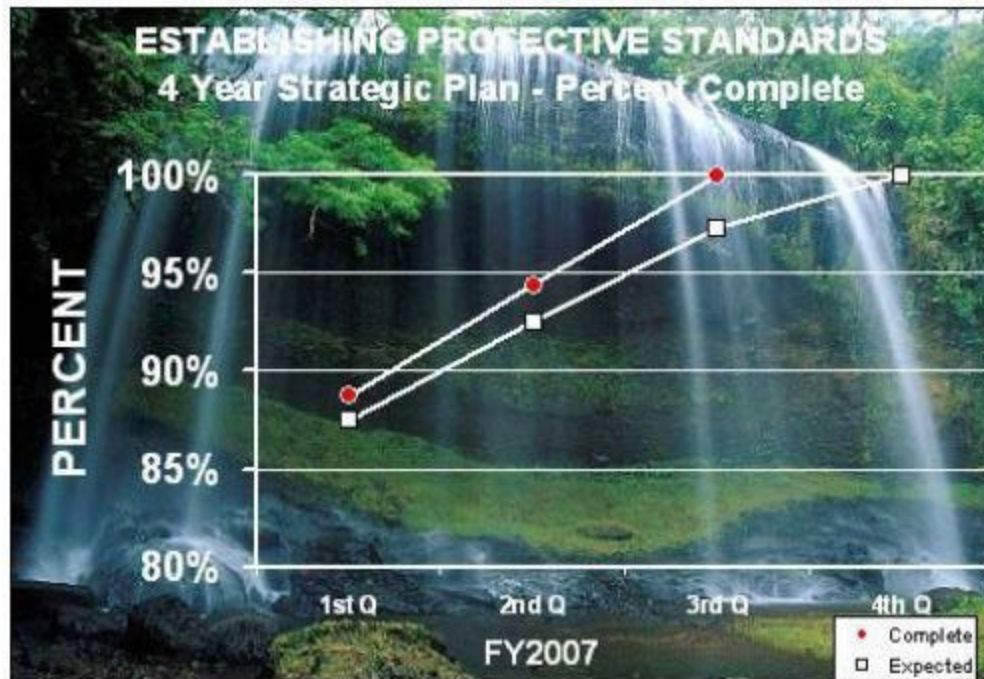
The Department of Environmental Conservation (DEC) uses Water Quality Standards as the criteria to determine if a waterbody is polluted. For example, if waterbody monitoring data consistently shows high concentrations of a substance that is not suitable for aquatic life then that waterbody is considered polluted (or impaired) for that designated use. Alaska formally reports the status and trends of its waters every two years in the Integrated Water Quality Monitoring and Assessment Report. The report includes information on the general health of Alaska's waters, DEC water protection programs and a list of impaired waterbodies, and how the impairment is being addressed or proposed to be addressed. Waterbodies are placed in one of five categories based upon known information. The report meets Alaska's responsibilities under Section 303(d) of the Clean Water Act to identify polluted waters.

As of the end of FY2007, there are 33 waterbodies listed in Category 5 - Impaired and Requiring a Total Maximum Daily Load (TMDL), which is essentially a waterbody corrective action plan. The waterbodies are scheduled for development of a TMDL over a seven-year period. Once a TMDL has been developed, an impaired water is moved into Category 4, which lists those waters which are impaired but for which a TMDL or other recovery plan is in place. In FY2007, 2 TMDLs were completed.

## A1: Strategy - Establish protective standards for Water Quality.

**Target #1:** Protective standards for Water Quality are complete by June 30, 2007.

**Measure #1:** % of revisions to targeted standards for Water Quality are complete by June 30, 2007.



**Analysis of results and challenges:** The federal Clean Water Act requires DEC to review and update the Alaska Water Quality Standards every three years. These standards describe the chemical, physical and biological condition of state waters (e.g. coastal marine waters, lakes, rivers) necessary to protect human health and the aquatic life living in and using the water. Water Quality Standards are used to determine wastewater permit discharge requirements, to assess whether waterbodies are polluted, and to set cleanup goals for polluted waterbody recovery plans. DEC uses both national and Alaska-specific scientific studies and regulatory policies to ensure the Water Quality Standards are relevant to Alaska's conditions and needs.

DEC has completed adoption of revised standards for mixing zones, residues, dissolved oxygen, analytical testing methods, and natural conditions. DEC is facilitating the U.S. Environmental Protection Agency review and approval of the new state Water Quality Standards, as required by the Clean Water Act. At EPA's request, DEC is developing procedures explaining how the new regulations will be implemented in NPDES wastewater discharge permits. DEC is also consulting with federal agencies on Essential Fish Habitat and the Endangered Species Act review of the new standards.

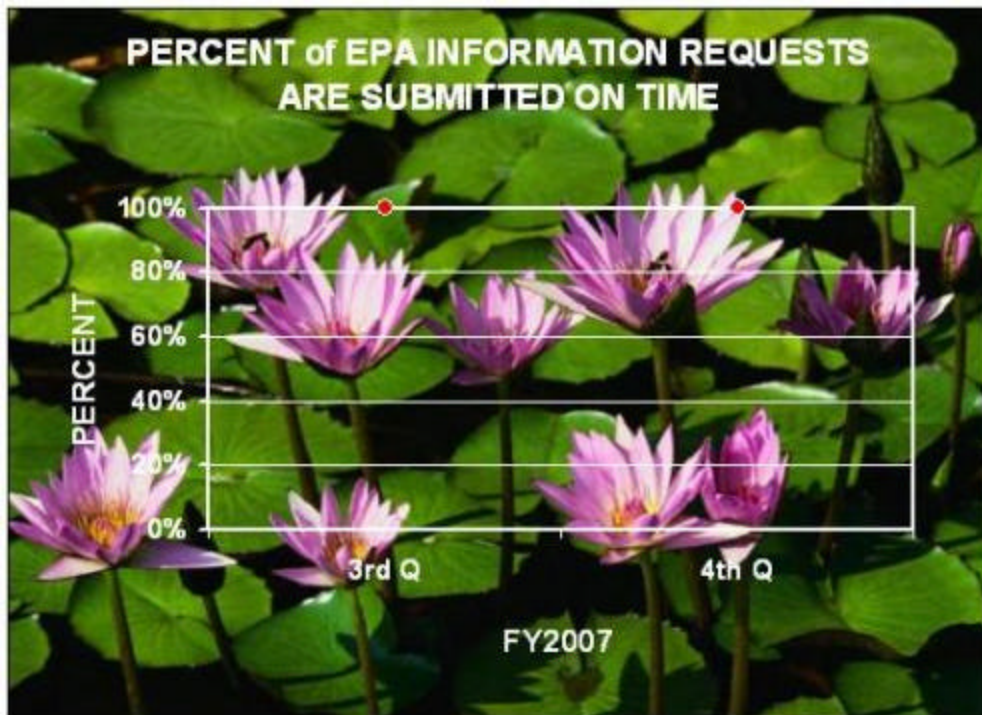
In FY2007, DEC completed the Water Quality Standards review by proposing a new procedure for implementing natural condition-based standards for those waters where water quality is naturally lower than the default statewide standard. DEC assessed options for further revisions to Water Quality Standards and developed a new 3-year workplan.

Further information on the Water Quality Standards may be found at:  
<http://www.state.ak.us/dec/water/wqsar/trireview/trireview.htm>.

**A2: Strategy - Assume control from the EPA of National Pollutant Discharge Elimination System (NPDES) as established in the Clean Water Act.**

**Target #1:** 100% of EPA information requests are responded to within agreed upon timeframes.

**Measure #1:** % of EPA information requests are submitted on time.



**Analysis of results and challenges:** On August 27, 2005 the Governor signed SB110, which directs DEC to seek and assume primacy for the National Pollutant Discharge Elimination System wastewater permit and compliance program. DEC submitted an application to EPA for their approval on the legislatively mandated deadline of June 30, 2006.

EPA will submit a list of comments on the application. DEC will respond to information requests and supplement gaps in the application within agreed upon timeframes. This process will continue until primacy for the NPDES wastewater permit program is approved.

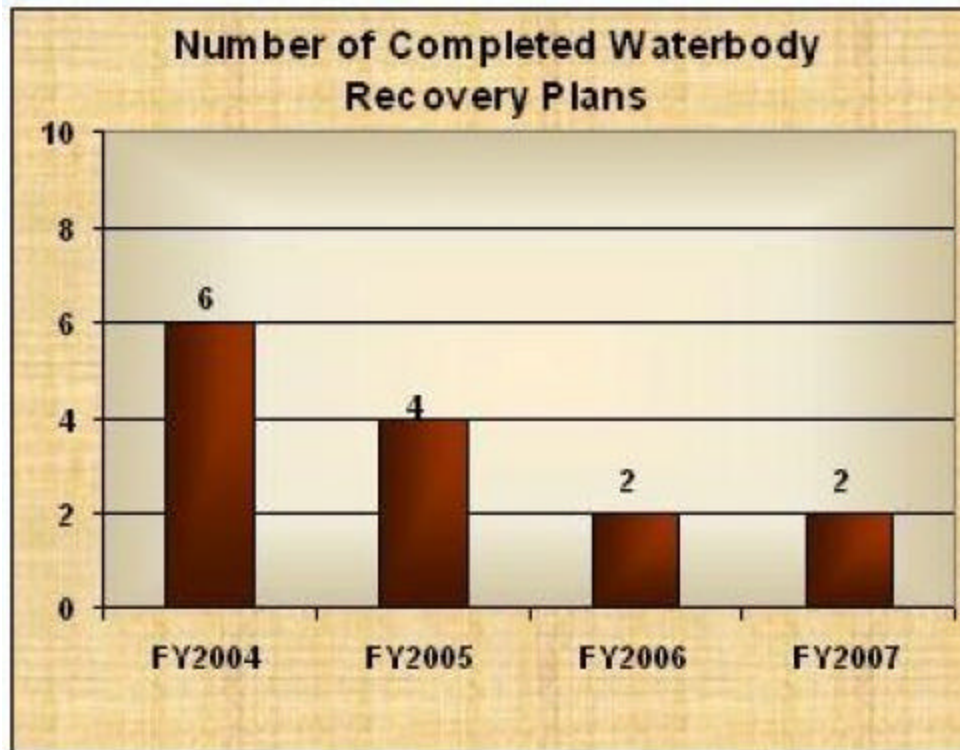
This was a new measure and no data was available until the third quarter of FY2007. During the third and fourth quarter of FY2007, DEC achieved 100% response to all EPA requests within the agreed timeframe.

More information on the state effort to gain control over the National Pollutant Discharge Elimination System program can be found at: <http://www.dec.state.ak.us/water/npdes/npdes.htm>

**A3: Strategy - Restore polluted waterbodies to their designated uses.**

**Target #1:** Two waterbody recovery plans per year.

**Measure #1:** Number of polluted waterbody recovery plans completed during the year.



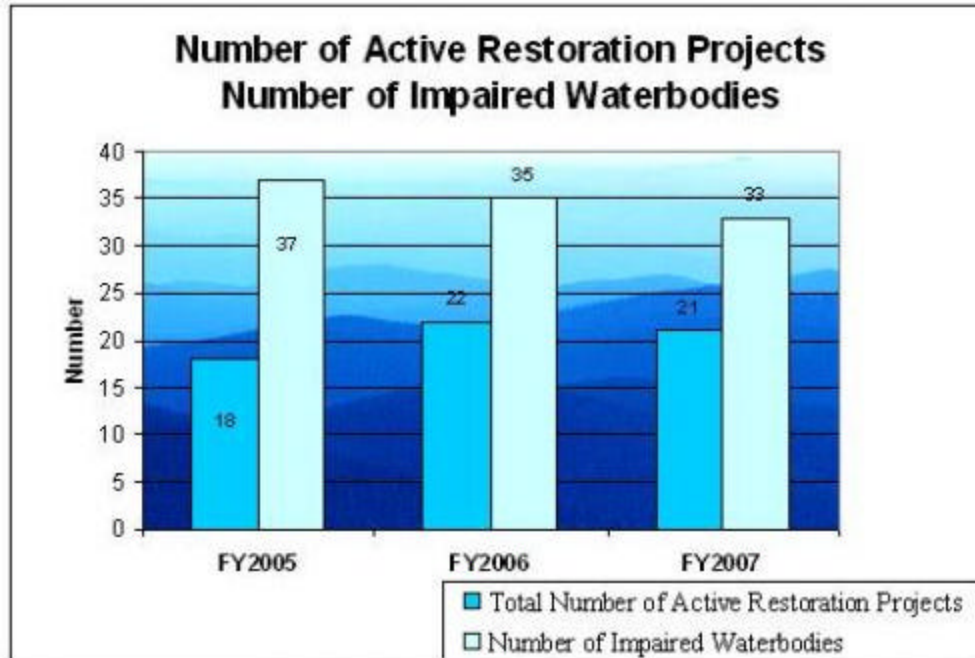
**Analysis of results and challenges:** When waterbodies are determined to be impaired (when they exceed Water Quality Standards for a particular pollutant), they are added to the Clean Water Act Section 303(d) list of impaired waterbodies submitted to the Environmental Protection Agency (EPA) every two years. It is incumbent upon the State and the EPA to work to restore waterbodies. Restoration is accomplished through the development and implementation of either a Total Maximum Daily Load (TMDL) document, a Waterbody Recovery Plan, or through the implementation of permits or other controls. These plans or permits identify the source of the pollutant and the amount of pollutants that can be introduced to the waterbody while still allowing overall recovery to proceed. With this knowledge, parties who discharge pollutants are given an "allowance," or "total maximum daily load" for that pollutant, and/or prescriptive actions called Best Management Practices (BMPs) that they must follow, to stay within that allowance.

The first step toward the recovery of an impaired waterbody is the development of the TMDL or Waterbody Recovery Plan. The EPA is required, by court order, to complete at least two of these documents in Alaska, each year. TMDLs and Waterbody Recovery Plans developed by DEC, either directly through staff work or indirectly through contract or grant efforts, are approved by the EPA and can be applied to this legal requirement. The EPA may also initiate work on TMDLs or Waterbody Recovery Plans directly, with their staff or contracted efforts.

DEC strongly supports the development and implementation of these plans and has committed to completing a minimum of two per year. In FY2003 two were completed; in FY2004 six were completed; in FY2005 four were completed; in FY2006 and FY2007, two were completed. Implementation is proceeding on all impaired waters.

**Target #2:** Ten active restoration projects per year.

**Measure #2:** Number of active restoration projects during the year.



**Analysis of results and challenges:** Polluted or "impaired" waterbodies are identified in the biennial "Integrated Report" submitted by DEC to the Environmental Protection Agency. The target for restoration of these waterbodies is at least 10 active restoration projects per year.

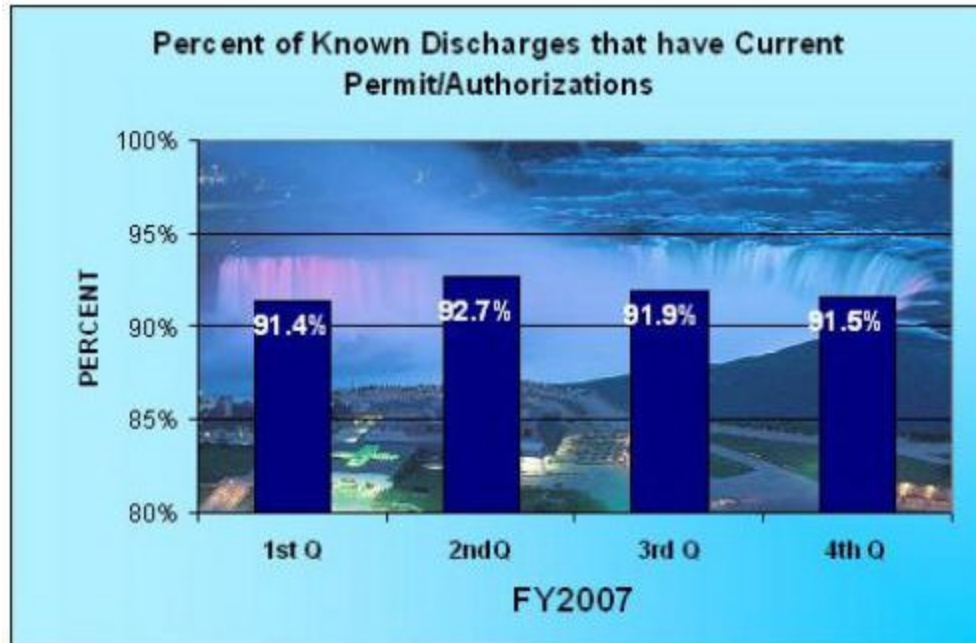
Restoration projects may be conducted by grantees who have received funds through the Alaska's Clean Water Actions (ACWA) grant program, by contractors, by other State agencies, or by DEC personnel.

Reporting began during the 3rd quarter of FY2004. Data will be reported annually at the end of each fiscal year. At the end of FY2005, 18 restoration projects were ongoing, in FY2006, 22 restoration projects were ongoing and at the end of FY2007, 21 restoration projects were ongoing on impaired waterbodies.

#### A4: Strategy - Issue discharge permits/authorizations.

**Target #1:** 100% of known dischargers have current permits/authorizations.

**Measure #1:** % of known dischargers have current permits/authorizations.



**Analysis of results and challenges:** The Wastewater Discharge Permit program issues three kinds of wastewater discharge approvals:

- 1) State individual permits and authorizations under 18 AAC 72
- 2) State permits and plan approvals of on-site disposal (septic systems) under 18 AAC 72
- 3) Certification that EPA-issued NPDES and Army Corps of Engineers wetland permits meet state water quality standards under 18 AAC 70.

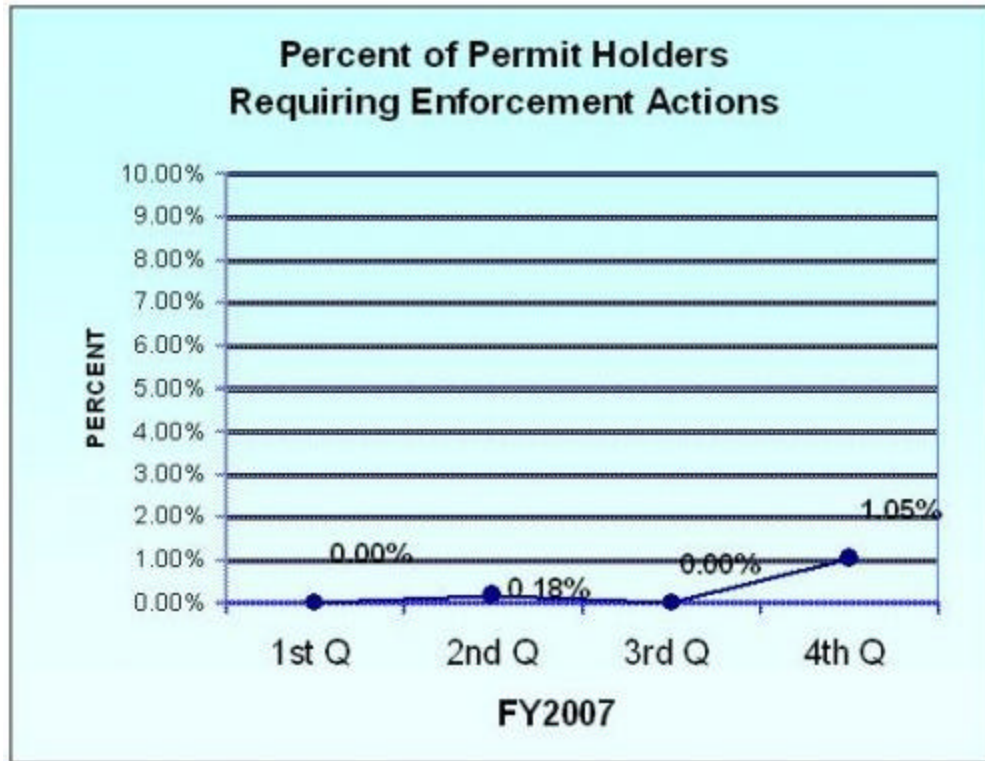
A major tool for tracking and keeping permits current is the new permit database developed in anticipation of NPDES primacy. Achieving the 100% target will be improved with automatic notification of renewals built into the system.

For more information on the Wastewater Discharge Permits program, go to:  
<http://www.dec.state.ak.us/water/wwdp/index.htm>

**A5: Strategy - Enforce compliance with permit/authorization conditions.**

**Target #1:** Dischargers requiring permits are compliant with permit/authorization terms and conditions.

**Measure #1:** % of permit holders requiring enforcement actions.



**Analysis of results and challenges:** DEC can and does enforce wastewater and water quality regulations as follows:

- For failure to obtain a permit for a discharge to surface or ground water for activities requiring a permit;
- For failure to meet end-of-pipe limits or for exceeding water quality standards in the receiving water;
- For failure to comply with other permit requirements such as reporting monitoring results.

Ideally the performance measure should be 0%. Failure to obtain a permit is a clear violation while a case must be built for enforcement based on complaints, inspections, or failure to comply with a permit condition. While DEC gives compliance assistance, enforcement actions are occasionally necessary. In FY07, several DEC inspections were used to build cases for non-compliance that resulted in a EPA enforcement actions with monetary penalties.

A major tool for tracking compliance is the new permit database developed in anticipation of NPDES primacy. Electronic storage and tracking of monitoring results and reports will enable DEC to see trends in compliance for individuals and industry sectors. A new enforcement and compliance unit is planned under state NPDES primacy.

The fourth quarter increase reflects cruise vessels under a compliance order that will be covered by a new general permit now in development.

For more information on DEC's wastewater program, go to:  
<http://www.dec.state.ak.us/water/wwdp/index.htm>

## Component: Facility Construction

### Contribution to Department's Mission

Assist communities in improving sanitation conditions.

### Core Services

- Provide grants, loans and engineering assistance for drinking water, sewerage, and solid waste facilities.
- Provide training programs for and certification of water and sewerage system operators.
- Provide over-the-shoulder and emergency assistance to system operators in remote communities.

End Result	Strategies to Achieve End Result
<p><b>A: Citizens are protected from unsafe sanitation facilities.</b></p> <p><u>Target #1:</u> 100% serviceable rural Alaska homes are served by safe and sustainable sanitation facilities.</p> <p><u>Measure #1:</u> % of serviceable rural Alaska homes served by safe and sustainable sanitation facilities.</p>	<p><b>A1: Allocate funding based on health related needs.</b></p> <p><u>Target #1:</u> 2.5% annual reduction in rural sanitation deficiencies that are health related.</p> <p><u>Measure #1:</u> % reduction of rural sanitation deficiencies that are health related.</p> <p><b>A2: Increase operator certification compliance.</b></p> <p><u>Target #1:</u> 2% annual increase in the number of rural sanitation systems which comply with water treatment operator certification requirements.</p> <p><u>Measure #1:</u> % annual increase in the number of rural sanitation systems which comply with water treatment operator certification requirements.</p>

### Major Activities to Advance Strategies

- Provide engineering and technical assistance to communities in planning, designing, and constructing sanitation facilities.
- Track grant payments.
- Execute loan agreements.
- Administer grants and loans.
- Track loan payments.
- Train water and wastewater facility operators and respond to emergencies.

### FY2009 Resources Allocated to Achieve Results

**FY2009 Component Budget: \$7,080,100**

**Personnel:**

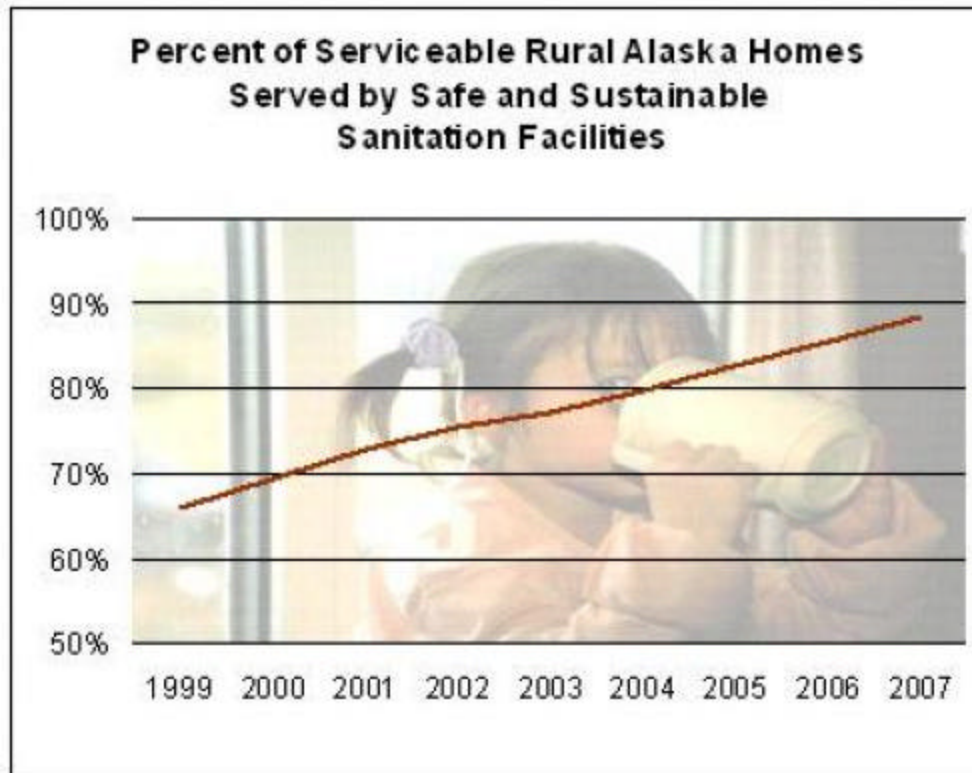
Full time	37
Part time	0
<b>Total</b>	<b>37</b>

## Performance Measure Detail

### A: Result - Citizens are protected from unsafe sanitation facilities.

**Target #1:** 100% serviceable rural Alaska homes are served by safe and sustainable sanitation facilities.

**Measure #1:** % of serviceable rural Alaska homes served by safe and sustainable sanitation facilities.



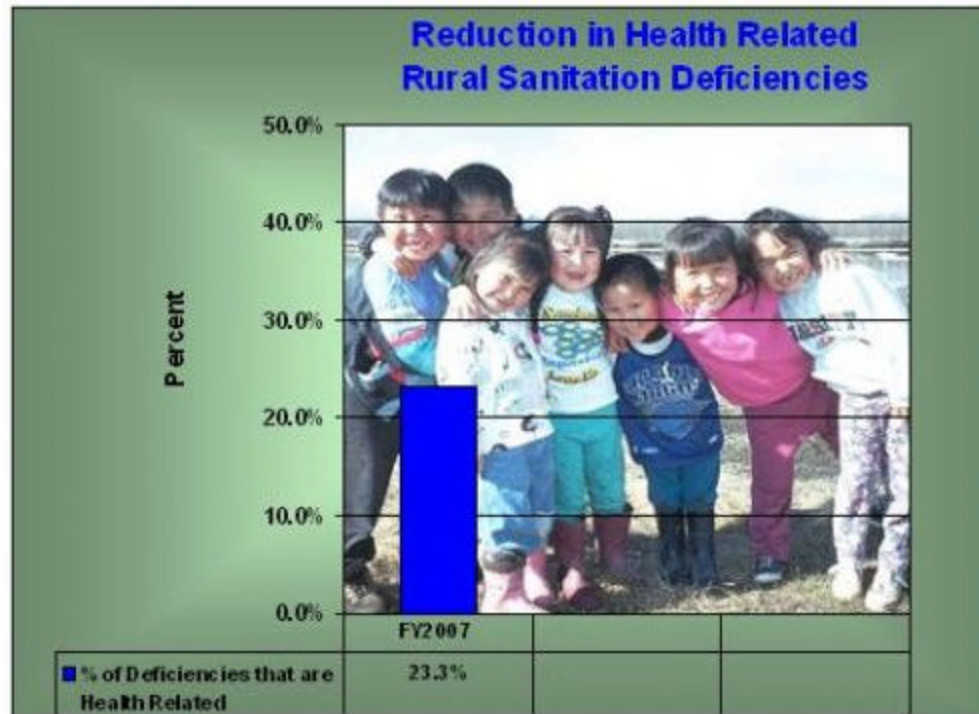
**Analysis of results and challenges:** Rural Alaska is characterized by over 280 isolated villages scattered across an area more than twice the size of Texas. The residents in many of these communities lack drinking water and wastewater infrastructure that is fundamental to protecting public health. The Village Safe Water program works to improve the health and safety of rural Alaskans by assisting communities to plan, design and construct safe and sustainable sanitation infrastructure.

Data to measure progress toward meeting the goal of all serviceable rural Alaska homes being served by safe and sustainable sanitation systems is collected on an annual basis. A serviceable home is defined as an existing home that is occupied year round and located in an area where piped, closed haul or individual septic tanks/wells are feasible. A sanitation system is defined as sustainable if the community managing it has the financial, technical and managerial capacity to properly operate and maintain it over a period which equals or exceeds the system's design life. For the last seven years, the percentage of rural Alaska homes served by adequate sanitation systems has increased by an average of 3% per year. Contingent upon the availability of funding being maintained at FY2006 levels, the program's goal continues to be an average increase of 3% per year.

## A1: Strategy - Allocate funding based on health related needs.

**Target #1:** 2.5% annual reduction in rural sanitation deficiencies that are health related.

**Measure #1:** % reduction of rural sanitation deficiencies that are health related.



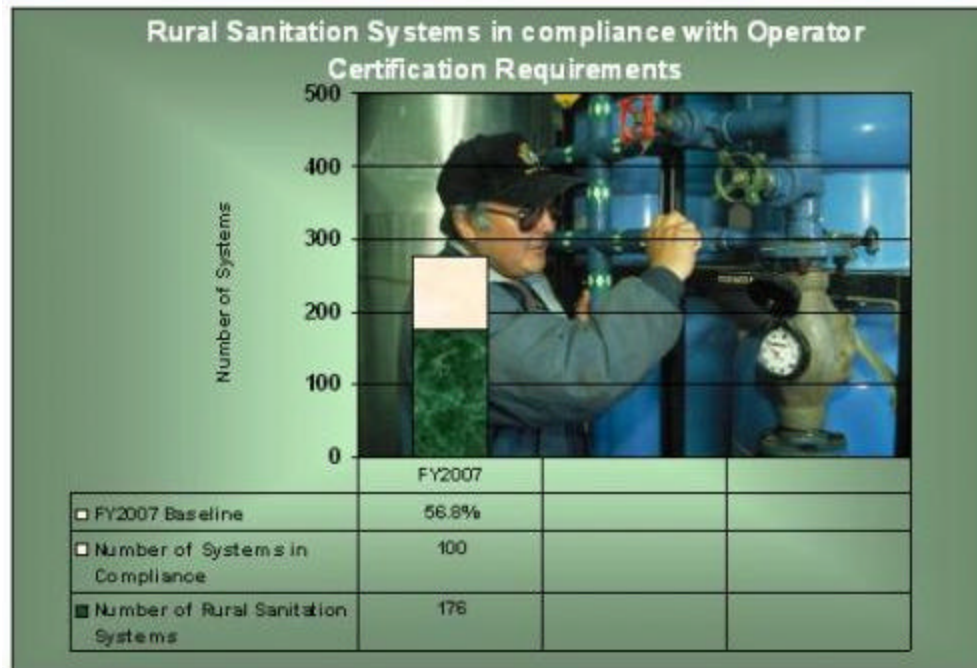
**Analysis of results and challenges:** The cost of addressing rural sanitation needs far exceeds available resources making it necessary to prioritize funding requests. Grants made available through the Village Safe Water (VSW) program are allocated based principally on a five tier ranking system that considers the relative beneficial impacts of proposed projects. The first two tiers are homes currently not served (Tier 1) and projects which will bring community drinking water supplies into compliance with public health standards (Tier 2). Since VSW's primary goal is to address sanitation deficiencies that are causing or are likely to cause public health problems, Tier 1 and 2 projects are VSW's top priority. Essential upgrades, beneficial upgrades and desired upgrades (Tiers 3, 4, and 5) are not considered health related and are not measured as a part of this strategy.

Progress in reducing sanitation deficiencies that could effect public health is quantified by the estimated cost of addressing such needs as compared to the cost of addressing all sanitation deficiencies. In FY07 (baseline year), 23% of rural Alaska sanitation needs were health related. Data related to deficiencies will be collected on an ongoing basis throughout the year and cost estimates for addressing these needs will be updated annually. The VSW program's target is to reduce sanitation needs that are health related by an average of 2.5% per year.

## A2: Strategy - Increase operator certification compliance.

**Target #1:** 2% annual increase in the number of rural sanitation systems which comply with water treatment operator certification requirements.

**Measure #1:** % annual increase in the number of rural sanitation systems which comply with water treatment operator certification requirements.



**Analysis of results and challenges:** Water treatment operators are responsible for safeguarding public health. Certification validates they have the qualifications necessary to meet this responsibility. The State's Operator Certification (OC) program classifies water systems based on their size and complexity and determines whether operators have experience and knowledge commensurate with their system's classification. In order to assist operators achieve certification, the OC program offers training and administers examinations.

Although the OC program oversees certification in water treatment, water distribution, wastewater treatment and wastewater collection, this measure is limited to water treatment certification as it is regarded the most directly related to public health. This measure also excludes communities with less than 25 residents or communities where residents obtain water on a house by house basis (private wells or rain catchment for example) since these communities are not subject to operator certification requirements.

Progress in increasing operator certification compliance is quantified by the number of rural sanitation systems meeting certification requirements as compared to the total number of rural sanitation systems subject to certification requirements. In FY07 (baseline year) 57% of rural sanitation systems subject to certification requirements were in compliance with such requirements. The OC program's target is to increase the number of systems in compliance by an average of 2% per year.